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THE NETHERLANDS EAST INDIES

A COUNTRY IN THE MAKING

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ONE glance at the map shows that the N.E.I. form the bridge between the vast continents of Australia and Asia and at the same time the main gateway between the Pacific and the Indian Ocean. The first-mentioned Ocean will be the Ocean of the future, with the majority of the population of the world living in the adjacent continents. The centre of gravity is moving fast from the Atlantic Ocean to the East and this war will speed it up.

One has to look at the scale of the map in order to realise the great vastness of this equatorial country, at the same time the largest insular empire.

It covers 730,000 sq. miles, and the capital, Batavia, in the island of Java, lies at a distance of 532 miles from Singapore, 900 miles from Penang, 1780 miles from Hong Kong, 3242 miles from Yokohama, 3876 miles from Sydney and 7613 miles from San Francisco.

Superimposed on the map of Europe this insular empire stretches from Ireland to the Black Sea, and on the map of the U.S.A. from California to the Atlantic coast. It covers a surface of 1300 miles from North to South and 3000 miles from East to West.

The main island is Java, the others are Sumatra, Borneo, Celebes, New Guinea, and the smaller ones of Bali, Lombok, Sumbawa, Sumba, Flores, Timor, the Moluccas and some 3000 even smaller isles.

When I went there in 1910 somebody asked me to hand a

package to a friend in another place. When I arrived there, I found out that it would take me only three weeks to deliver the package and its message, so I sent it by mail.

Asked for the characteristics of the country, I must say that they cover the limitless mangrove swamps along the coast, with the fast kingfishers and other brightly coloured birds skimming over the creeks between the trees, the fertile plains with terraced rice-fields and palm-trees in dozens of kinds, the peaceful villages amid the fruit gardens and bamboo bushes, the hillsides with the well-managed plantations, the jungle and the mountain ranges with the lofty cone-shaped volcanoes and the snow-clad mountains of New Guinea.

The population of this part of the Kingdom of the Netherlands amounts to 70,000,000 inhabitants, with 1,300,000 Chinese, 70,000 Arabs, 240,000 Europeans, of whom 200,000 are Dutch nationals. They belong to 200 different tribes, with 200 languages and dialects, and they range from the highly cultured Javanese and Balinese to the primitive Kubus and Orang Utan of the Sumatra jungle and to the Papuans of New Guinea, who for a great part still live in the Stone Age. In the Government schools, text-books are used in 30 different vernacular languages, while Dutch is the language in High Schools, colleges and universities.

All these different tribes and tongues are firmly united under the Netherlands administration, which has governed the country for over three centuries. Unity was shown when the mother country was overrun by the Germans, and again when the Japanese attacked the Allies in the Pacific.

The country has been greatly and rapidly developed in the last forty years. Modern harbours, railroads, wireless stations and airfields have been built. Also, a good road system which is used by plenty of cars, electric trains and trams, and, of course, numbers of motor buses. But on the same road one can still see the little horse-carts, drawn by the native ponies, some full of pep, like the Sandelwoods, miniature thoroughbreds, and the Batak horses, from the mountain plains of Sumatra, also the very slow, squeaking bullock-carts, drawn by bullocks or water-buffaloes.

It is a tropical country, situated on both sides of the equator, very hot and damp. That is what makes the climate hard to stand, more than the temperature. The thermometer never rises above 96 degrees, compared with the highest day-temperature in England of 100 degrees. But the temperature never falls below 68 degrees at sea level, not even on the coolest day of the west monsoon, the rainy season. The temperature decreases by one degree for every 350 feet of altitude, so the snowline lies at about 13,000 feet, which is only reached in the mountains of New Guinea. But in the mountain resorts of Java and Sumatra it can be very cool, and there is some frost during the nights.

There are many meteorological and magnetic stations in the

islands, and the Royal Meteorological and Magnetic Observatory at Batavia is one of the best equipped scientific institutions for the study of the atmosphere in the tropics, whose records date back as far as 1866.

The N.E.I. form with Holland, Dutch Guiana and Curaçao one of the four integral territories of the Kingdom of the Netherlands. The Queen and the States-General in Holland constitute the highest legislative power. The Governor-General at Batavia rules the country in the name of the Queen, assisted by the Advisory Council of the N.E.I. and the legislative body of the People's Council, which was established in 1918. This Council consists of sixty-one members, partly elected and partly appointed, with a native majority and representatives of the Chinese and Arab groups of the population. The centre of gravity has been moving fast from the Legislature in Holland to that in Batavia, and the Governor-General has executed his right to veto resolutions only a few times. As regards its administration, the N.E.I. is divided into twenty-two governmental sections or provinces, under the supervision and guidance of Resident Governors.

Politically the country is divided into directly administered territory and self-administering territories. In the latter the highest authority is vested in native executive councils, subject to a certain measure of control by the Central Government.

In Java there are four of these " Principalities," governed by their own princes, and in the other islands, the so-called Outer Possessions, there are hundreds of these sultanates.

The Queen and the Government, now in London, have already proclaimed that after the war an Imperial Conference, consisting of representatives from all the parts of the Kingdom, will decide on the future status of, and the relations between, the four parts of the Empire.

For the last twenty-five years there has been a strong move for decentralisation of power from the central authorities to the provinces and governorships with their local councils, which also have a native majority.

Regarding finance, the N.E.I. is a body corporate, represented by the Governor-General or by the Minister for the Colonies.

Finance and treasury are absolutely separated from those of the Mother Country, which in all matters of imports is considered on the same footing as other foreign countries. There is no preference for goods from the Netherlands. The national debts amounted to N.I. Glds. 1,500,000,000 (roughly, £200,000,000). The Java Bank is the currency bank, with its headquarters at Batavia.

The country is mainly agricultural, both on account of its soil and climatic conditions. The principal product of the country is the staple food of the population, rice, maize and tapioca products, in which it is self-supporting, thanks to the Government's policy.

The annual crop of rice amounts to 13,000,000 tons. Since

1900 over 200,000,000 guilders have been spent on irrigation to supply food for the fast growing population.

At the same time very considerable capital is invested in plantation agriculture to produce export products, mainly by Netherlands and Netherlands Indian concerns, but also by British (about £100,000,000), American and other interests (German included), Chinese and Japanese.

The main export products are : sugar, 5 to 8 per cent. of world production ; rubber, 40 per cent. ; tea, 18 per cent. ; sisal fibre, 22 per cent. ; copra, 30 per cent. ; coffee, 5 per cent. ; cinchona bark (from which quinine is manufactured), 90 per cent. ; kapok, 75 per cent. ; pepper, 85 per cent.

The principal mineral export products are oil (8,000,000 tons), tin (40,000 tons) and bauxite (200,000 tons), with much greater possibilities.

The total exports amounted to 12,057,000 tons in 1939.

The value of exports and imports is shown in the following table :

Year.	Imports.	Exports.	Surplus.
1913 .	Fl. 436,682,000	Fl. 614,203,000	Fl. 177,521,000
1920 .	1,116,213,000	2,224,999,000	1,108,786,000
1930 .	855,425,000	1,159,601,000	304,176,000
1935 .	271,089,000	471,733,000	200,644,000
1939 .	469,400,000	739,600,000	270,200,000

The rapid growth of the population, caused by the improvement of public health and the stamping out of different tropical diseases such as cholera and smallpox, has led to a scheme of emigration from Java to the other islands, which has proved very successful.

For the same reason, and in order to make the country and its defence less dependent on imports, industrialisation has been stimulated and supported by the Government. A chemical industry, textile factories, a scrap-iron melting plant, paper mills, glass factories and a powerful hydro-electric plant are being developed. The country has great resources of water-power.

The last decades have shown a great economic development of the country. Good road systems have been developed, excellent harbours built and airfields established in many places. The Royal Dutch Airlines (K.L.M.) link the N.E.I. with the Mother Country in a five days' flight three times a week. A daughter company, the K.N.I.L.M., developed an extensive scheme of communication all over the Archipelago and with Australia, Singapore and Indo-China.

The Kn. Paketvaart Mpij. (Royal Navigation Co.), with a fleet of 325,000 gross register tonnage, maintains seventy-three services, interconnecting the various ports of the islands and services with Rangoon, Bangkok, Saigon, Australia, South Africa and South

Netherlands East Indies : Coffee Bushes with Shadow Trees.

Netherlands East Indies : Bamboo Plantation, Botanical Gardens, Buitenzorg.

Netherlands East Indies : Ricefields.

Somaliland : Desert Well. See page 6.

America. The communication between the N.E.I. and Holland was kept up by the Netherlands Steamship Co. with a fleet of 277,000 tons, and the Rotterdam Lloyd with a fleet of 330,000 tons, while the Java-China-Japan Line regularly plied between the N.E.I., the Philippines, China and Japan. The Royal Dutch Shell had a large tanker fleet for the transport of its oil to the ports of the East.

Free commerce and an open-door policy has encouraged not only the commerce of the world but also the investment of large capital, German and Japanese included, as we have seen already.

An up-to-date credit system has been organised for the natives, and legislation has encouraged native co-operation.

Deforestation has been vigorously countered for many years and an extensive system of forest preservation has developed, with afforestation on a large and scientific scale. The forests in Sumatra and Borneo, besides a rapidly expanding output of timber, also supply many forest products, like gum damar, copal and other resins, rattan and wild rubber.

Cattle breeding and sea fishing have been greatly encouraged, with experimental stations in different places.

The educational system has been adapted to the needs of the native communities, with the indigenous popular education left to the village under central supervision and the financial aid of the Government. The folk school has been linked up with the secondary schools by a so-called link-school, whereby higher and university education is open to the whole population. Besides these there are many vocational schools where vaccinators, nurses, analysts, telegraph operators, etc., are trained. There are also good agricultural schools with many excellent experimental stations for native and plantation agriculture.

The dangerous situation of the N.E.I. on the most important lanes between two oceans was recognised by the Netherlands at an early date in the beginning of this century. But for many years the problem was how to pay for the necessary defence, and later the illusion of collective security postponed all plans. Only after the Japanese aggression in Manchuria, and even more after the attack by Italy on Abyssinia, notwithstanding the League of Nations' sanctions, the Netherlands embarked upon a far-sighted defence programme, providing for the building of three battle cruisers, a dry dock, tankers, submarines, etc. The People's Council approved the plans, but before the building could be started the home country was invaded by the Germans.

This was a sign for an accelerated strengthening of the army, navy and air force in the N.E.I. The greater part of the Royal Netherlands Navy was always stationed there, and, for the dollars received for the export of rubber, tin, etc., sold to the U.S.A., they bought all the planes, tanks, speed boats, etc., they could lay hands on, while the naval base at Surabaya was greatly strengthened,

the munition factories extended, and a great number of airfields built all over the Archipelago.

This explains why the N.E.I. were ready when Japan attacked the ABCD-front, and why her navy, air force and army have been able to play their part in the common conflict.

A SCOTSWOMAN IN SOMALILAND

By Bridget M. Tillman

"How does one get to Somaliland?" I enquired. I was going out there to join my husband, who is on the medical staff. The shipping office clerk at once replied "You sail as far as Aden, take the train to Jibuti, and then fly to Berbera." I thanked the clerk for his prompt advice, but fortunately did not rely on it, or I would have had to wait till the Red Sea was tunnelled to permit the running of his train. Geography was apparently not his strong point.

British Somaliland, a Protectorate of 68,000 square miles, stretches along the west side of the Gulf of Aden, and has a nomadic population of about 345,000. The capital and port is Berbera, so romantically tropical when viewed from the bridge of the approaching mailboat, which brings to its shores passengers of many races, in addition to the all-important cargo of sheep and goats; Berbera, with its mosques, its gently swaying palm trees, and white-washed, red-roofed buildings, silhouetted against distant, barren mountain ranges.

Once ashore, however, intense heat, maddeningly persistent flies, stifling humidity tend to suffocate romance. Met by kind friends, however, conducted to the coolness of the Club or the modern bungalow with its electric roof fans, drinks off the ice, a cold shower, and fresh attire stifle the tendency to weep.

Our boat brought the mail and food supplies from Aden, to which port I did sail, but which I left in a small steamer which plies between Aden and Berbera. It also brought, as well as the mail—a great day, mail day, with its welcome home letters—bacon, butter, and sausages, but this week, to the general gloom, no kippers! The almost childish enthusiasm over fresh food is explained by the fact that, for a year or more, our friends have existed on mutton in all its disguises and tins of every known edible substance.

I might mention here that in each "station" there are Government Gardens, where one may obtain practically every kind of fruit and vegetable for the asking. There is, too, keen and friendly rivalry in the cultivation of our own gardens, and in some stations we managed to grow our favourite flowers. But not at the coast.

Berbera is the seat of Government and the residence of the

Governor. Here is the administrative staff, and the headquarters of the very efficient Somaliland Police, controlled by a Commissioner and a Deputy Commissioner, both of whom live in the capital, only periodically trekking round the country. The other stations are Hargeisa, Burao, Boramo, Eragavo, and Zeila. At each of these stations the officer in charge is the European District Officer, who has a staff of Indian clerks and assistants, and a detachment of Police under a native sergeant.

The armed forces form part of the King's African Rifles, and consist of the Camel Corps, with its headquarters at Burao. Part of the Corps actually use camels, part ponies, and the rest is mechanised, the personnel of the latter including Yaos from Nyasaland.

My destination was Hargeisa, where my husband was then stationed, and as something had gone wrong with the expected motor transport which had been arranged for me, I had to endure the hundred-odd miles in a very uncomfortable motor truck, with all the precious belongings I had brought from home. But I arrived at length, and took up housekeeping in one of the bungalows of the country, built of sun-dried bricks and roofed with corrugated iron. The terrific heat which the iron roof attracts was somewhat allayed by a lining of asbestos.

The food problem was simplified by individual poultry farming, and eggs and milk were obtainable locally. A weekly sand grouse "shoot" in the station provided variety, while if one ventured farther afield there were partridge, guinea fowl and so on to be had for the pot. A well-cooked camel steak is said to be a dish *par excellence*, but I accepted this statement, and left it at that.

Excellent cooking was achieved on primitive stoves and open fires of wood or charcoal. The house staff consisted of half a dozen male servants—cook, head boy, dhobi or laundry boy, and two young boys who in theory assisted the cook and head boy or bearer, but who, in actual practice, did most of the work, and who preferred to be designated kitchen and tennis chobra respectively. There was also a sweeper of very low caste, who was probably the most intelligent of all. An interesting point in connection with the staff was that one had to ensure that they were of different tribes if possible ; the tribal system is a power to be reckoned with, and the Somalis are more clannish than the Scots !

The Somalis are a proud race, and their greed and thievish propensities are equal to their pride ; it is a good deed to get the better of a Christian—they are Mohammedans.

Life was peaceful—if one had no objection to being robbed on a small scale, and was prepared to devote some time each morning to straightening rugs and pictures, ornaments and furniture. A straight line is a thing unknown to any Somali of my acquaintance. So also are all colours with the exception of blue—they do recognise black and white. I should qualify my accusation about thieving

by confining it to the " townees," the Mohammedans who are pseudo-civilised. The true Somali met with in the interior is a delightful creature whose horror of the missionary is only equalled by his deep distrust of the schoolmaster.

As is the case throughout most of Africa, the Somali women do all the work and spend their lives tending the stock, always wandering in search of water, with their children trotting alongside, and their young babes bundled on their backs. It is hardly surprising that these people are avaricious to a degree; they have a hard struggle for existence against the climate, their stock is their livelihood, and a drought means disaster.

In spite of the severity of the climate, the health of the Europeans is good. Malaria and yellow fever are practically non-existent.

There are no theatres, cinemas, shops or private telephones, and only Berbera has water laid on in the houses, as well as electricity. There are few of the amenities of life in Europe, but somehow one accepted this and there were many compensations. When housekeeping duties permitted, there were riding, tennis, golf, and other forms of sport, while there was considerable entertainment from informal morning tea parties. And there were official dinner parties and dances.

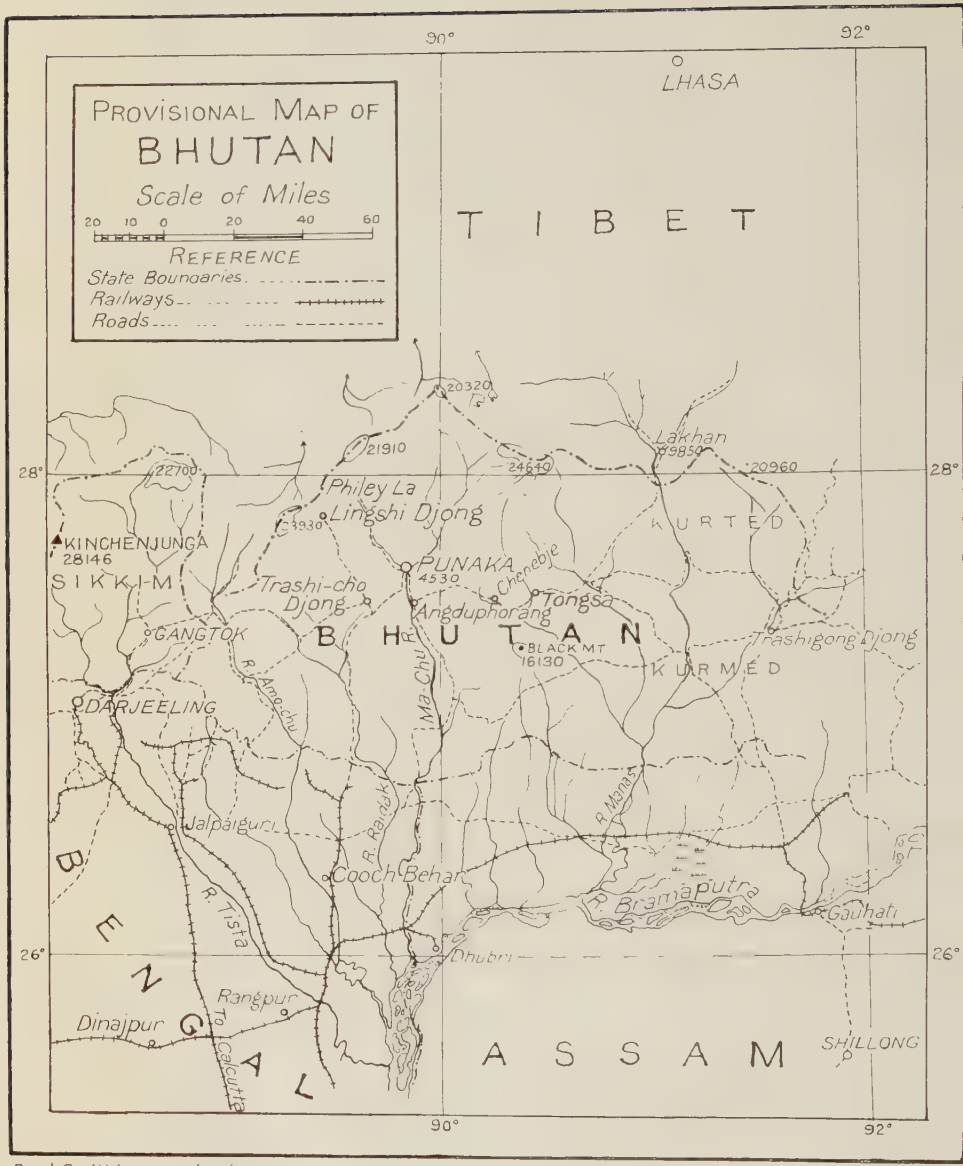
The " tour " or term of service is about one year, after which there is extended leave. My station, on my last tour, was a hundred miles from Berbera and about the same distance from the frontier of Italian Abyssinia. We had been entertaining a party of Italian officers to dinners and dances. They were charming, and loved us like anything. But when they had had enough to loosen their tongues somewhat, they unwittingly allowed some of their real feelings to emerge, and I think they hated us and never forgave " sanctions." At the end of one of the dances a code telegram was handed to the District Officer, which, when decoded, warned him to take immediate steps to put into operation the measures which had been previously arranged in case of war and an attack by Italy. The entertainment came abruptly to a close, two of us women held our heads high, while others dissolved in tears. We women were at once bundled into cars and made for the coast at high speed, with the knowledge that we might be overtaken at any moment by an Italian raiding party. However, we reached safety, and, ultimately, home.

There is little now left of big game in Somaliland, and the country has lost the fame it once enjoyed in this respect. There remain five disgruntled spinster elephants who hide away in the hills to the north-west. Some parts of the country boast of lion, kudu, and oryx, hyenas and jackals abound, roaming the country, sometimes much too near for comfort, in search of food or human prey.

While the Governor's headquarters are in the depressing climate of Berbera, he has a summer residence not far from the

Somaliland : Typical Scenery.

Netherlands East Indies : Oil Palm. See page 1.



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port, at Sheikh, high up on the mountains. The road up is a marvel of engineering, a hair-raising path cut out of the precipitous hillside, with the wall of the mountain on one side and a sheer precipice on the other, growing always more fearsome as one ascends, with no protection from going over. It is only a one-way road, open at certain hours of the day for traffic going up, and at other times for traffic going down, as there is no room to pass in safety. Even so, many accidents happen to the animals which form the greater part of the transport.

Once at the top of Sheikh Pass one is in a different climate ; it is still hot in the daytime, but cold as soon as the sun goes down, and both fires and blankets are appreciated. So that, even so near the enervating Berbera it is possible to be braced up for further hard work.

The outbreak of war abruptly terminated my association with Somaliland for the time being at least, and I had to leave my husband behind to his duties.

But I hope one day to be back, and it may be that the shipping clerk will be right when he tells me to take the train to Jibuti from Aden.

A PLANT COLLECTOR IN BHUTAN

By R. E. Cooper, F.R.S.G.S., F.R.S.E.

Bhutan is a small native state north of Bengal and on the southern side of the Himalayas, between Tibet and India. Its area is about 20,000 square miles. It comprises a series of valleys running south from the peaks of the Himalayas to the plains of Bengal and Assam.

Naturally there is a wide diversity of climate in the state, even if small, owing to the great difference in altitudes. It is steamy and hot in the foothills or " dooars," temperate half-way up, and cold in the upper part, where snow lies half the year. The sides of the valleys slope steeply, and are covered in the lower regions with the usual sub-tropical forest. In the central regions, however, at elevations of from 5000 to 8000 feet, these valleys widen, and are extensively cultivated, and it is in these that most of the population have settled.

Above these the valleys again narrow into gorges, and still higher are the upland pastures, reaching right to the bases of the peaks.

I spent two seasons in Bhutan, one from June to November, and the other from April to October. During the first season I explored the valleys of the west, and, on the second occasion, the valleys of the east, and the few peaks in the secondary ranges which are over 12,000 feet in height.

My path lay along the valley of the Raidak river, and was the

usual native narrow track. At first through sub-tropical forest, it then left the valley bottom and climbed the hill-sides, serving *en route* the villages settled on the cultivated lands.

The peasants' houses are of mud on a timber framing ; there is a basement, used for housing the farm animals and the farm implements, above which the family live. The more important personages, however, such as the Djongpen, or headman of the Djong, or district, have more substantial and larger dwellings. The roofs are almost flat, and are constructed of split pine planks weighted down by heavy stones.

The sub-tropical rain forest thinned away at 4000 to 7500 feet, when oaks began to appear, and shortly after this I found the first rhododendron, with a growth of from 3 to 10 feet, and bearing white scented flowers. Then came primulas and saxifrage.

Still higher up were stretches covered only with grass and bracken, but the side glens provided viburnums, cotoneasters, and berberis. Nests of wasps and bees were numerous in the rocky crevices.

Crossing a ridge where the turf was wet and peaty, I found stunted ilex and dwarf bushes of other flowers. Over the ridge the path descended through pine forests, with clematis and a white climbing rose. Wherever possible the ground was terraced for cultivation, and was irrigated by means of small water channels. In places water channel and path joined, to save valuable ground, presumably, and walking on the path also meant walking in water.

As valleys became narrower, the pine forest altered to maple, oak, poplar, and birch, with stunted bamboo at 9000 feet. Junipers were also to be found, while the woods were carpeted with violets, anemones, wild strawberries, androsaces, and primulas. On the heights the hardiest trees, such as birch and juniper, were mere bushes, while true bushes were flattened as the result of the heavy pressure of snow in winter.

In the first upland country which I reached there was a gallery on the cliff face, in which were a number of holes which apparently were used as dwellings or shelters. One Djong which I passed, the Lingshi Djong, is on the summit of a piece of moraine with sides 500 feet high in the middle of a broad valley.

The Pass of Philey La, from which a view far into Tibet can be had, was the limit of my operations on this occasion, which also brought into my net some fine pale blue poppies.

The crest of the ridge of the eastern bank of the Raidak, about 14,000 feet above sea level, is bare of trees, and in places bare of everything but stones. The continuous showers of rain at temperatures little above freezing point in the height of summer fill hollows among uprising crags of rock, and make pools and little lakes of clear water, in their depths having a rich deep blue colour resembling the well-known blue poppy. These pools and lakes overflow down the hill-sides in narrow waterfalls. In places there is a thin

Bhutan : Raidak Valley.

Bhutan : Yak Transport.

Bhutan : Djong or Castle of Angduphorang.

Bhutan : Courtiers' Form of Salutation and Farewell.

sodden turf for weeks on end, and this, during the months of May, June, and July, is as gay with flowers of different colours as any oriental carpet.

The plants that carry the blossom are very dwarf; often the flowers themselves are very tiny, but the quantity gives the fine colour effect. A mere list conveys no idea of their range, for the majority are individually so insignificant as to obtain no merit in a garden. In any case there is a different set for every month. But it is in such gay pastures, kept always fresh by the mists, that the plant hunter must seek for new treasures, month after month ranging the hill-sides and tops, and incidentally arranging food and shelter for his men, and keeping them as cheery as possible, so that they may continue at their jobs.

My own expedition consisted of half a dozen Lepchas, picked up at Darjeeling, born naturalists. Carriers were engaged from village to village.

The continuous searching day after day is often profitless, but occasionally one strikes a lucky patch. In one such I discovered three blue poppies all within an acre. The most frequent was a single flower of deep purplish shade, borne on a single stem from a rosette of leaves. It was successfully sent back and established in cultivation, but tends gradually to die after a few years owing to conditions being drier than in its natural home.

Tucked away into crevices soaked by the mists was a small cluster of pale blue flowers on thin stems a few inches long, set amid a rosette cluster of grey, much-cut leaves. Here again was a gem, but not one likely to become firmly established in gardens. But as gardeners are good triers, one might be lucky and get it going.

Away from the sodden turf were slides of rock *débris* from outcrops which rise above the hill-top to any height from a few feet to several thousand. On one of these slides, set among bare stones, among which its roots were driven deep, was the third blue poppy, a lovely thing holding a spire of pale blue flowers above a mound of foliage set on stones. Unfortunately this was not very common, and although it seemed likely to thrive in our gardens, it dies out after flowering, so that unless seed is set it is lost.

Other plants of particular merit which may be mentioned were primulas or primroses, a unique rhododendron, a shrubby buddleia, and a lobelia.

As characteristic of the plant collector's luck I may mention the following incident. Crossing a steep slope of rock *débris* while investigating some bushes which seemed to be the only vegetation, the *débris* began to slide; I was thrown on my back and slid with it. The men ran down the firmer side to attempt to reach and stop me, while I grabbed bush after bush in my rapid descent in the vain endeavour to stop. But the grabbing did act as a brake and slackened my speed and enabled me to edge gradually nearer the

side of the moving mass till a branch held out by one of my men reached me. I held on and was hauled into safety. A part of the branch was wrenched off to provide me with a stick to help me along, and this was found to bear flowers. These were pressed and ultimately identified as *Buddleia Cooperi*. The incident shows how unique plants may literally be " fallen upon " when plant hunting.

My experience was accidental, but my party were so happy-go-lucky and casually careless that hardly a week passed without one or other being saved from disaster through some dare-devilry which might easily have meant mutilation or worse.

The Bhutanese themselves are a sturdy race, averaging about 5 feet 8 inches in height, with olive complexions. The dress of the men consists of several smocks, knee length and girded about the middle. Head and feet are bare. The women wear cloth wrapped about their bodies, bound round the waist with a narrower piece and fastened on each shoulder by a thorn or silver pins. Both sexes use a piece of cloth draped as a scarf over one shoulder and the opposite hip, and this is held in both hands in front of the body so as to cover the feet when greeting any person, while the head is bowed.

In Bhutan no person of standing walks ; he rides a mule, on a saddle consisting of a small wooden frame covered with rugs.

In one Djong which I visited, Tashigong Djong, the Djongpen roused my interest by referring to the " tail people." I suggested that these people with tails must be monkeys, but he assured me they were real human beings. On my return from a short trip I found two men and two women of the tailed folk awaiting me. The " tail " turned out to be merely a cattle-hair pad suspended from the back of the waist girdle. It was said to be used as a cushion or as a buffer when carrying loads, but it was a tribal custom which gained for the tribe the name of " tailed people." So was one illusion shattered. What was possibly more interesting was their hats. Indians have no hats ; Tibetans wear a form of fur deerstalker with the flaps turned up ; the Lepchas of Sikkim wear a thin, close-fitting felt hat brocaded on the narrow turned-up brim ; the Bhutanese wear no hats ; but the " tailed folk " wear a round, bowl-shaped hat of goat- or yak-hair, nearly an inch thick, and fitting close to the head. I wore one myself, and found it good protection against both the heat of the sun and the cold. The cold in the early mornings high up is intense, and when my party used to make a very early start, they first chewed a cupful of quite dry meal, and washed it down with a cup of arrack.

It is interesting to note that in the small state of Bhutan there are two distinct areas, distinct in many features of rock and flora, with distinctive peoples using different words for the same thing.

One new plant proved to be a species of Lobelia, and the first and only record of its kind, not only in the Himalayas, but in Asia, Europe, or North America. Its only known relations are the giant

lobelias of Mount Ruwenzori in Equatorial Africa, one of which it closely resembles. As these are found in no other region of the earth's surface, the occurrence of a related and comparable plant far away on a hill-top in the east Himalayas presents a problem of distribution not yet solved.

The principal agricultural products of Bhutan are cotton, rice, potatoes, maize, citrus, beans, and wheat, the location of each depending to some extent on the altitude with its different climate.

A catch crop is grown for lac insect on a species of *Zizyphus*. Small pieces of insect-infected *Cajanus* are placed among the shoots of the *Zizyphus* in September when the fresh annual growth is complete. The insect breeds rapidly, and its progeny, piercing these shoots, causes the exuding of gum. In November the shoots are pruned off and sold with their incrustation of both insects and stained gum.

On the tops of the spurs are the grazing grounds, each in the charge of a herdsman who is provided with a hut. While these huts would have provided welcome shelter for my party, the voracious appetites of their resident fleas made sleeping in the open preferable.

Other pests were leeches and pipsee flies, whose bites became septic if not promptly treated. Considerable flights of locusts were also seen.

Part of my operations led to the inspection of the Black Mountain district. We left the main east-west road between Tangsa and Angduphorang at Chenebje, following a track southwards towards the mountain. This path led first through blue pine and then through spruce forest, over steep hill-sides to the Pass of Lamsi La at 11,550 feet. The country here sloped away southwards in a wide, wind-swept curved valley, dotted with settlements mostly growing buckwheat, and bare of trees except occasional patches of blue pine, with the typical scrub of this forest by the streams. The district is called Pobchaka. The Lamsi La ridge has some high peaks east of Pobchaka, including Black Mountain. These were visited *via* the small ridge bounding Pobchaka on the east, which was traversed to its junction with the main ridge. The road was very hazardous, and at times lay along the edge of the rock outcrops. On this ridge there was juniper forest which had many splendid plants 30 feet high. Rhododendrons were scarce, but the sward was dotted with cyananthus with its azure, horizontal trumpet flowers.

The track to the actual Black Mountain itself was most trying, scrambling over steep rock faces, and then through spruce forest in hollows, and culminating in a fearful climb up long screes of loose blocks. The actual summit of the highest peak at 16,130 feet has a shape like a house with a gable roof with projecting eaves, and is unscalable for the last few hundred feet.

The countryside was at first a series of shallow open valleys,

but these successively and rapidly deepened, to become gorges clothed in heavy forest. The head of the valley directly south-east of the ridge opposite Angduphorang spur is fairly open and extensive, with much cultivation and many settlements at 8500 feet.

The moist forest rapidly gave way to a drier flora, and the soil at 6000 feet is dotted with oaks. Glimpses of the reddish soil of the hills show through the rich green of the young shoots of lemon grass which dot the lower, drier slopes, giving, at a distance, a beautiful effect of shot silk.

The Djongpen of Angduphorang was disturbed because a huge landslide on the Mo Chu river had dammed its waters for the previous four days, and the rush of water when the dam broke was expected to carry all bridges before it. The Djong of Punakha had been evacuated. At three o'clock in the morning of September 23rd the released waters came racing past, and carried away with a crash the big cantilever bridge connecting Angduphorang with the country in the west. The roads were so much damaged that part of my proposed itinerary had to be abandoned.

In the course of our return we reached the edge of a small lake at an elevation of 14,300 feet. The sun was shining brilliantly, and the temperature of the water was found to be far above the normal at such height. So much so that I decided to swim across the lake to have the experience of swimming at an altitude which makes rapid breathing necessary. At first the experience was not unpleasant, but about half-way over the water suddenly became bitterly cold, and after an involuntary gasp I made for the home shore as quickly as I could, and spent some hours and every available means, including cups of boiling cocoa, before the shivering engendered by the shock passed off.

Incidentally, boiling cocoa is not so hot at this elevation, because water overcomes air pressure long before 100° C. is reached, and can be drunk as it comes apparently boiling from the fire without scalding the drinker.

At the camp at this place, the first view from the tent door on awakening in the morning was a gloomy world enveloped in heavy frost. The stalwarts of the village six thousand feet lower down who carried for the party had slept on the open ground near by, curled up in their closely wrapped loosened smocks, and looked more like the sleeping huskies of an Arctic expedition than men of a Himalayan one.

As the morning mists dissolved, the plains of India could be seen in grey threaded with the rivers in silver. East and west the mountain ranges swung like breakers to the south. Their sources, the great peak clusters, were barely discernible in the dawn light until flushed by the rising sun, and, as they caught the light, to the far east loomed a group with one huge, square-topped summit in pure snow, seen before from the Tashigong ridge, not found on the map. Nearer the north were the Malakatchu snows, due north

the Gichcha snows, and, lit in quick succession to the west, came Chumolhari, the Chola peaks, Kinchenjunga, and—perhaps—the farthest was Everest itself.

The heavens were flushed with colour, and, as the land slowly pulsed to life with a sombre green, a picture grew that faint swirls of thin cloud began to screen almost at its inception, making it for ever an ineffaceable memory.

THE ORIGIN OF THE SCOTTISH RIVER SYSTEM

PART I

By Alex. Bremner, D.Sc.

The Scottish river system dates from a remote past, but efforts to trace its early form and subsequent development need not be regarded as "pure speculations" that simply "give interest to the ever fascinating occupation of map interpretation."

It is the purpose of this article to state and discuss the theories of Davis, Mackinder and Gregory; to make certain suggestions; and to attempt a restoration of the initial drainage system of Scotland based on the evidence furnished by existing rivers.

Theories of the Origin of the Scottish River System

A. Gregory's Theory

If one is prepared to accept both Gregory's premises and his conclusions, gone at once is every difficulty in the interpretation of Scottish scenery and river systems: everything is taped out and scheduled in a time-table (8 (1)).

In *Eocene** times there was prolonged denudation in Scotland and removal of all but small patches of the once extensive Cretaceous deposits. Gentle folding on east-west axes (*Oligocene* to *Middle Miocene*) and Atlantic subsidences on north-west—south-east lines (*Upper Miocene*), followed by others along north-east—south-west lines (*Lower Pliocene*), produced torsion and diagonal fractures that affected Scotland, and preceded, accompanied and followed the activity of the Tertiary volcanoes (*Upper Miocene*). Scotland was subsequently (*Lower Pliocene*) reduced to a south or south-east sloping plain (cf. Mackinder).

In the *Middle* and *Upper Pliocene* "uplift of the British Isles" led to "the formation of the fiords and Scottish loch basins with fresh fracturing" and "the opening up of previous fractures—causing

* The sequence and dating of events are supported merely by the statements of this author.

them to gape until they were wide enough to capture the drainage in the high lands and admit the sea in the low lands." In addition, " associated with the latest Alpine movements " came " the formation of east-west valleys and geographical lines "; for example, " the valleys that divide the Highland Plateau (west of the Great Glen) into many east-west bands " and " the south shores of the Moray and Pentland Firths."

On Gregory's showing, therefore, Scottish rivers need have no general community of direction, but may be guided along routes predetermined by his hypothetical systems of folds and gaping fractures—torsional and other—towards any one of the eight principal points of the compass. As far as river development is concerned, this theory appears to be a reversion to Catastrophism, which one fondly imagined died with its last great protagonist, Murchison. The only real value it seems to possess is that it calls attention to the probability of earth movements during the establishment of our river system and the likelihood of its modification thereby. But in a terrain like the Scottish Highlands, already intensely folded and overfolded on a large scale and plicated on a small scale by orogenic movements, it is impossible that *structural* evidence of subsequent gentle folding during Tertiary times can be detected with any degree of certainty or even detected at all.

Tertiary warpings have been proved for different parts of England by both structural and physiographical evidence. In only one part of Northern Scotland can such a Tertiary (late Pliocene ?) movement be definitely proved—*on physiographical evidence alone* (2 (3)).

B. Davis's Theory

Though Davis did not discuss the rivers of Scotland he was of opinion that they had an evolutionary history similar to that of English rivers.

For England he held that in the late Cretaceous a coastal plain underlain by Mesozoic rocks extended far to the north-west of the present outcrops of these formations. Certain residual summits of old mountains, not completely drowned and buried at the time of greatest depression, became the sources of consequent streams that flowed south-east across the coastal plain laid bare by gradual and intermittent elevation. Entirely new consequents arose on the intermediate parts of the plain.

As the land rose these consequent streams extended their courses farther and farther to the south-east. " If," says Davis, " the uplift is uneven with domes and troughs the streams will assume an appropriate arrangement in accordance with the special direction of dip slopes."

In course of time the uplifted coastal plain, if not reduced to a peneplain, reached an advanced stage in the cycle of denudation. As the cycle progressed towards completion, drainage became

adjusted to structure. Consequent streams cut across the grain following the dip of the upheaved coastal plain : subsequents were developed on weak strata as these were revealed by denudation. Resistant rocks formed low, evenly-bevelled escarpments, pierced in water-gaps by consequent streams : subsequents working back along weak rock-belts at the base of the escarpments had captured some of the original consequents.

Then followed upheaval. According to Davis, "the rivers of to-day, in the mature stage of the present cycle of denudation, appear to be the revived and matured successors of a well-adjusted system of consequent and subsequent drainage inherited from an earlier and far-advanced cycle of denudation."

Wherever the Mesozoic cover that determined the initial drainage had been removed, the rivers were superposed on older rocks. Whatever the structure of these might be, the rivers could at first only by the merest chance exhibit any sign of adjustment to that structure : such adjustment might—and did—follow later (5 (2)).

C. Theory of Mackinder, Peach, and Horne and their Disciples

It will be better to state this theory as far as possible in the authors' own words:—"It may be convenient to state in general terms the theory of river-origins which is here applied to the explanation of the river systems of Britain. Denudation, whether marine or subaerial, marginal or superficial, is constantly tending to degrade every land, however mountainous, to a base-level. This level is usually grained like sawn wood because the plane of denudation intersects folds in the constituent rock-beds. If land thus denuded be raised afresh by crust movements, a series of streams is likely to be formed which will flow over the plateau following any initial tilt of the nearly flat surface but *unaffected by the perhaps complicated structure and varying quality of the rocks beneath.* Such streams are described as consequent on the original tilt of the planed and raised surface" (15).

Peach and Horne (16 (1) (2)) state the theory as follows:—"In early Tertiary times Scotland formed part of a continental area or high plateau continuous with Ireland on the south-west and Scandinavia on the north-east, the surface of which had been reduced to a peneplain by denudation." "At the initiation of our river system Scotland lay mostly, if not wholly, on the south-east slope of the High Plateau. Across this inclined uplift the consequent rivers drained south-eastward into a Miocene sea stretching from the north of France to beyond Schleswig-Holstein."

The west-east valleys of the Dee, Don, Leven-Tummel, and part of the Tweed Mackinder regarded as anomalous. "Possibly," he says, "these anomalous courses are due to re-excavation of ancient overlying channels belonging to some earlier system."

The same explanation is given—and probably rightly—of the valleys of the Ness and Lochy, Findhorn, and Spey ; " but," he goes on, " the east-west valleys are parallel to the clean-cut shore-lines which extend eastward of Cape Wrath and Inverness, and also the shore and river line of Solway Firth and the Newcastle Tyne." No explanation is suggested for this parallelism. Of the east-west coast-line of the Moray Firth, Peach and Horne offer this explanation :—" The apparently abnormal direction of the shore-line—from Fort George to Kinnaird Head—is probably due to the strike of the planes of unconformity at the base of the Trias and at the base of the Upper and Middle Old Red Sandstone." So far from its base being a plane the Middle Old Red Sandstone rests on a most uneven surface : some outliers (unfaulted) lie many hundreds of feet below closely adjoining high ground composed of schists or granite. Between Upper Old Red and Permo-trias there is no apparent physical break, and they can be distinguished with certainty only on palæontological evidence.

" It is quite possible that the Tweed may be the lower course of a river which once had its sources in the Western Highlands. If the Nith were continued into the Tyne the course of the Nith-Tyne and the Goil-Gare-Tweed may have exhibited sympathetic eastward curves, and it may be suggested that the Dee and Don represent the lower easterly components of rivers of the same series whose upper south-easterly courses have been obliterated by the subsequent Spey, Findhorn, and Ness " (15, pp. 132-3). It is not easy to see why, on Mackinder's hypothesis, there should be an easterly component or what is implied in " sympathetic."

Mackinder's final summing-up is as follows :—" All the important consequent streams now remaining, except those of the Wealden Uplift, have *south-easterly* courses, tending to *easterly* in the Pennine region and along the eastern margin of Scotland and *southerly* in Ireland " (15, p. 139). Of Ireland he has already said : " The whole corrugated surface must once have been buried in the substance of a plateau tilted gently south-ward " (15, p. 135). This conclusion does not accord with the original assumption, and no hazy generalisations and qualifications about " easterly components " and " sympathetic curves " help the argument : a tilt is either south-east or it is not.

The Tilting of a Peneplain and its Results

Let us imagine a stable land-mass not yet peneplained and let most of it consist of belts of rock, strongly contrasted in power of resistance to erosion and striking N.E.-S.W. Prolonged denudation will lead to peneplanation. By the time the cycle of erosion is approaching old age drainage will be well adjusted to the structures disclosed at the level then reached by denudation, and a series of rivers following N.E.-S.W. lines should be the most

pronounced feature of the river network, the shallow valleys following the less resistant, the low watersheds the more resistant rock-belts.

Unless planation be complete and something closely approximating to a geometrical plane* result, no upheaval with tilting to the E. (or S.E.) can possibly directly originate a series of W.-E. (or N.W.-S.E.) streams consequent to this tilting. The short W.-E. (or N.W.-S.E.) streams—tributaries of the longitudinal rivers—that follow the direction of the tilt will be rejuvenated ; but it is inconceivable that such minor streams should work back by headward erosion across ridges of resistant rock ; capture the longitudinal streams, already well established on the weaker rocks ; and give origin to a dominant system of parallel, through-flowing rivers ranging W.-E. (or N.W.-S.E.). It is still less likely that the relatively puny consequents, initiated on, and traversing parts of, the sea floor that may have been laid bare by upheaval of the land accompanying the tilting, would be able to accomplish the task. It is thus and thus only that seemingly original consequent streams can be initiated on a tilted peneplain. The tilting, it is clear, will be little likely to initiate any but the short and feeble streams of a recently emerged coastal strip (9, 14).

Incompleteness of Peneplanation in Scotland

It is clear to anyone acquainted with the Scottish Highlands that the peneplain was far from perfect. Peach and Horne, whose knowledge of the physical features of the Highlands was unique, point out (16 (2)) that extensive monadnocks rise above the Highland Plateau, an elevated, tilted, and now dissected peneplain. Widely scattered over the area are numerous summits and even what seem to be remnants of still higher erosion surfaces (*e.g.* the Cairngorms, the Ben Alder Group, the Ben Nevis massif, and that culminating in Craig Meaghaidh) that still rise well above 3000 and even 4000 feet. In the Highland area the maximum residual relief after the formation of the peneplain was at least 1400-1500 feet.

Mackinder's Theory demands not a *peneplain* but a *geometrical plane* ; and in order that streams may respond to tilting in the perfect manner demanded by it, the cycle of erosion must have been carried to completion so as to provide a surface " unaffected by the perhaps complicated structure and varying quality of the rocks beneath " ; and this, as we have just seen, did not happen. This theory must, therefore, be discarded.

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* " Absolute planation is so rare as hardly to need consideration " (7 (1)).

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OLD PERTH CRAFTS

By Jean Matheson, M.A., Hons. (Edin.) ; Naval Staff, Oxford

Many visitors to Perth have expressed surprise at failing to find much evidence of its past glory. No stone stands of the castle or of the dwelling places of the kings who held court there ; nothing remains of the early Scottish Parliament House or Royal Mint ; not a fragment is left of the richly ornamented shrines and altars

Old Perth Crafts.

1. Flesher, 1761. 2. Maltman, 1790. 3. Glover, 1782. 4. Blacksmith, 1798.
5. Barber and Wigmaker, 1777. 6. Farmer, 1849. 7. Merchant, 1747.
8. Carter, 1777.

OLD PERTH CRAFTS.

1. Flesher, 1749. 2. Ferryman, 1778. 3. Mason, 1785. 4. Shipbuilder, 1813.
5. Baker, 1794. 6 and 8. Fishermen, 1775. 7. Baker, 1824.

which are reputed to have outshone all others in sixteenth-century Scotland ; and of the city walls there survives but a short stretch in an obscure lane. The history of the city is told in names and plaques.

The absence of more satisfying evidence is surely indicative of the active part played by the burghers of Perth in the controversies, wars, and fervours that swept over Scotland from earliest times. Little could be expected to remain intact in a city which was stormed in every rising in the kingdom and in which the heat of the Reformation burst with full fury when the fiery followers of Knox razed the majority of its religious houses. By 1521 it was the only walled town in Scotland—a distinction it held till 1776 when rapid growth rendered the narrow confines of its walls cramping and they were demolished to permit further building.

To the human geographer and historian Perth offers unusual insight into the lives of its citizens of about two hundred years ago. In the burial ground of Greyfriars and in the old kirkyard of the Parish of Kinnoull across the River Tay stand tombstones on which are named and often depicted the occupations of those they commemorate. Weathering has rendered the engraving on many of them impossible to decipher, but those still legible give proof of the variety of crafts practised in the city. The stones in the best state of preservation date between 1747 and 1850, and the majority bear, in addition to craft symbols, an angel head with wings, an hour glass, and skull and cross-bones. After 1800 design becomes increasingly conventional and lettering deteriorates markedly. Though it cannot be assumed that these stones give any indication of the relative numbers of those employed in the various crafts, it seems legitimate to believe that the larger and wealthier the craft the more often would it be represented. As decay has progressed fairly uniformly in the churchyards and as distribution of type and age seem to have followed no ordered plan, the existing stones are probably as proportionate to the crafts as ever they were. The most commonly represented trades are those of weaver, glover, maltman, and blacksmith.

The large number of stones commemorating weavers is some indication of the importance of the industry in Perth in the eighteenth century. These stones are least interesting in design as a deer's head is the only *motif* used.

From the Middle Ages to early nineteenth century Perth was renowned for the skill of its glovers and their guild was one of the most powerful in the city. The wealth of its members may be judged by the excellent material and workmanship of the glover stones.

Long before the city became noted for fine blends of whisky many citizens were maltmen to trade, and tombstones can be seen which bear in large variety of arrangement the three tools of their work.

The fourth group indicates the position of Perth as agricultural centre and market town. The stone shown in photograph is the most fanciful in design of a large number of blacksmiths' stones. The close bond between country and city is shown also in the many stones erected in memory of farmers, and while most of these bear only an inscription some have a farm implement, such as a plough, to typify occupation.

Perth is no longer of importance as a port, though occasionally small boats of about 300 tons, carrying general merchandise, join the Tay sand dredgers in the harbour. Yet for many centuries the merchants of Perth carried on extensive trade with the Continent, and over the tomb of one who died in 1747 stands a very ornate stone, emblazoned with masted ship bravely dancing on the sea. Shipbuilding was important till early nineteenth century, and in the churchyard of Kinnoull lies a shipbuilder of Perth over whom is a stone bearing the square, dividers, chisel, and hammer of his craft.

In the same kirkyard is found perhaps the most amusing of these old stones. From 1621, when a flood swept away the bridge erected in 1617, until 1771 there was no bridge over the river and travellers and goods were ferried across. One of the last of the ferrymen lies under a stone on which is depicted a man poling a boat over decidedly choppy water.

Other stones tell of more domestic crafts. Many show the implements of masons, fleshers, and bakers, and one has been erected in memory of a barber and wigmaker, while another, in memory of a carter, was surely larger in concept than in execution as it bears a man leading a horse—but of the cart there is only half of a wheel.

Search for stones similar in type in the kirkyard of Greyfriars and the Old Calton burying ground in Edinburgh produced but one stone, sunk in the ground. In both were stones of the same period as those in Perth and indicating occupation by inscription, but the type of monument favoured was the small " chapel," often enclosed by high iron railings with heavy gate. Perhaps this difference can be explained by the relative wealth of the leading burghers of the two cities. Perth was in size but a country town; Edinburgh was the capital of Scotland. Hence the burghers of Edinburgh could easily afford something more pretentious and costly than those of Perth, and ostentatious chapels with elaborate decoration and bearing long eulogies took the place of the curious old stones with their craft symbols.

PLAN SCOTLAND NOW

By H. A. Rendel Govan, A.R.I.B.A., A.M.T.P.I.

This article does not profess to show how the future Scotland should be planned. Even experts are not yet unanimous on this matter. It is more for the purpose of emphasising the danger of not planning at all. The principle of planning for the post-war development of our country and of our resources is accepted Government policy, and is expressed in the planning organisations set up by Mr. Greenwood, Lord Reith, and the Secretary of State for Scotland. Their apparent lack of progress to date suggests that many people in political circles fail to realise the urgency of this work, and that others, whose interest lies in the complete restoration of pre-war conditions, are resorting to obstructionism.

This is scarcely surprising, for too often even ordinary people are heard to say that all our energies are required to win the war, and that therefore planning must wait till victory is ours ; or that it is so impossible to foresee what post-war conditions will be that we cannot plan now. Yet others, potential or actual planning obstructionists, claim that while there may have been some mistakes made, the pre-war unplanned, free exploitation methods of national development are the best possible, and that business and industry must be given a period for recovery after the war, without any control or restrictions upon them.

To put it bluntly, neither of these arguments against immediate planning for the future of Scotland holds weight.

For example, the facts of the housing situation are such as to dispose of the argument that we cannot foresee the future sufficiently to plan for it. No matter how we may be forced (or enabled) to change our methods of construction, we shall require to house the population of the country decently. This means that bigger houses must be built (officially over half the houses in Glasgow are undersized), and that they must be given more space around them. Even if we build as many ten-storey flats as the public would stand, our health standards, based not on the fads of fresh-air fiends, but on the proved economic benefits of healthy conditions, are such that the density of houses on much of our city lands must be lowered. In other words, we are going to require more land for housing, and our built areas must spread.

What is more, we have a tolerably good idea of how many houses and how much land are needed. Various estimates are current of the number of houses required in Scotland in the immediate future if the war were to finish to-morrow. These range from 250,000 to 500,000. The writer believes 400,000 to be a fairly sound estimate. Supposing we were to decide to tackle this housing famine by a Four-Year Plan—none too short a period

to ask a young war-married couple to wait for a house of their own when the husband returns to civilian life. If we were to tackle it on this basis it would mean that we should build complete a new Dalkeith, Wick, Ardrossan, or any other town you know of 7000 inhabitants or thereabouts, every week for four years ; for the shortage is already much worse than in 1918.

It is more difficult to decide in what localities the houses should be built, for this raises a host of points for consideration, such as the availability of work, play, shops, transport, higher education, water supply, drainage, or interference with agriculture or mineral workings. Some of these points demand Government planning and a statement of official policy ; but even without these, the professional town and country planner feels that he can make pretty safe guesses as to the most suitable localities for houses whose economics are based, as most are, on a life of sixty years.

All planning is bound together. Planning for the housing shortage is tied up with the availability of work and the preservation of agricultural land in any locality. These are two of the points that require Government planning ; for agriculture, manufactures, and mining are largely conditioned by the national export policy. In the past we have exported manufactures and imported cheap agricultural produce, to the detriment of our own rural population and of the soils of the world. Even if we wish, it is doubtful if we can continue this policy, for when peace returns the world may be found, through the making of armaments, to have built up a huge excess of manufacturing potential ; the Dominions, China, and Russia are all now manufacturing classes of goods which they previously imported ; while America, Japan, and all Europe, including ourselves, have vastly increased their manufactures. Pre-war Scotland with its surplus manufacturing potential in the heavy industries (legacy of the Great War) shows how disastrous such a condition can be when no adequate planning for it has been made.

Is the Government giving thought to this question ? If not, this problem of surplus manufacturing power may hit us very hard in Scotland, for we are still largely committed to the heavy industries for our prosperity.

Even as it is, our iron and steel industries are none too well located. There are considerable technical economies to be made by having the entire process of steel making, from coke and pig-iron production to the finished steel section, on one site. Furthermore, the costs of transport are such that, other factors being equal, the site for smelting iron ore should be right at the mine. Thus the whole process of steel making should be carried out where the ore is won, and it was for this reason that the great Corby steel works in the English Midlands were developed there. They are right on the ore field.

About two-thirds of Britain's pre-war iron ore came from

England and was smelted there. All ore has to be brought long distances to the Scottish iron works. This is why we now produce very little pig-iron in Scotland, and our steel industries are mainly composed of alloying and finishing plants for imported pig-iron, so that they cannot effect the same economies as their English competitors who can carry through all the processes on the one site.

Thus our Scottish steel industries are not advantageously situated by comparison with some of the English ones. When the Lanarkshire coals become uneconomic to work, within the next generation or so, their position will be still worse, for then neither of the main raw materials will be adjacent.

But this is not all. Our Scottish steel works may find their doorstep market of ship-building dwindling. There are three reasons for this: (1) If we cannot export we cannot import, so that fewer merchant ships may be built; (2) the war-time acceleration in the construction and flying of long-distance aircraft may, sooner than we expect, drive the luxury liner from the seas, so that these too may cease to be built; (3) new materials are threatening to supersede steel. Already the aluminium industries are advertising the reduction of shipping deadweight to be effected by the substitution of aluminium alloys for steel in engine castings. It is possible that plastics, too, may be applied in ever-increasing measure to the building of ships. If, and when, these changes take place, the Lanarkshire steel industries will find themselves situated disadvantageously indeed. It is a question if they are capable of adapting themselves to the new conditions which will then obtain.

Failing immediate adequate planning, the Government would be compelled to step in before conditions became catastrophic. It does not take much imagination to visualise the doleful compromise that would probably result. A minimum production of steel would be protected for a number of years, during which time the steel industry would be told it must put its house in order —in other words, cut its losses, close down Lanarkshire, and absorb the workers elsewhere if it could, which it certainly could not.

We have permitted *laissez-faire* in industry too long already. In the interest of so-called efficiency we have allowed businesses to grow bigger and bigger and the small man to be reduced to extinction. Now the big businesses themselves are threatened. The evidence placed before the Commission on the Distribution of the Industrial Population made it abundantly clear that, left to its own way, industry had centralised itself to an extent which menaced the economic well-being of the whole country.

Another reason for industrial planning, of particular interest to Scotland, may be cited. We have not been attracting the newer light industries in such a way as to counterbalance the loss of work in the older, particularly the heavy, industries. The new industries have been going to the south-east of England, and this one-way migration and centralisation of industry in the cities are to be

deplored. Their effects are plainly seen in the small burghs of Scotland. These towns, with their ancient traditions and tenacious individual life, are in a parlous state. They used to be the trading centres or ports of their regions. Now, in many, the markets have disappeared, small industries have closed down, the ships pass them by, and they have little genuine income. This state of affairs cannot continue for long. Work and income must be revived or these towns will die. The Commission on the Distribution of the Industrial Population recommended the decentralisation of industry, and to this the Government has promised to give full weight. We should plan on the one hand to decentralise work to the benefit of the small burghs, and on the other, to make the burghs fit to receive it.

Real planning for industry must avoid three things: (1) A continuance of *laissez-faire*; (2) bureaucratic control, with its killing of private initiative; (3) treating industry as the be-all and the end-all of life. Comprehensive planning which recognises industry as only one of the five great elements which go to make up the life of the nation alone will make for success. These elements are: worship, work, culture, play, and home.

* * * * * *

Let us return for a final illustration of the necessity for immediate planning to the point where it was stated that all planning is bound together—that (for illustration) planning for the housing shortage was tied up with availability of work, and the preservation of agricultural land, in any locality. We have just seen how essential it is to plan for industry, which is but one form, albeit a most important form, of work. It is no less essential to plan for preservation of agricultural land than for housing and industry.

It is a reflection upon the immediate past that although we have a geological survey of all Scotland to a scale of six inches to a mile, we have no survey of our soils. We have been more intent on minerals than on farming, but now we may be forced to pay very serious attention to what the surface soil can give us. If we cannot continue to export manufactures, we may have to become as nearly self-supporting as possible in agricultural produce. And there are those who tell us emphatically we *can* grow all the food we need in this island of ours provided we use our soils to the best advantage. To do so a complete preliminary soil survey is imperative. The Macaulay Institute states that such a survey, six inches to a mile, could be produced by ten trained experts in (or proportionately) five years. We should have this done at once, as a first stage in planning for agriculture.

It may not be out of place to explain very shortly wherein such a survey would differ from the land classification survey prepared by Dr. Stamp for all England. The essential difference is that while a land classification survey is based upon the agricultural use of the land at the time of survey, and can be compiled from the

statistics in the hands of County Agricultural Committees, a soil survey indicates the quality, composition, and the state of fertility of the soil, and can be completed only after all the land has been examined, field by field, samples (some of which are laboratory tested) being taken wherever conditions appear to change. In addition, the history of the treatment of the soil can be ascertained from the men who work the land.

Thus while land classification is primarily an indication of present use, soil survey is a measure of potential use, and, along with a stable Government policy for farming, forms the true basis for agricultural planning.

Even supposing we do revert to the importation of most of our food, there will still be need for soil survey. Our best soils will always be farmed, and therefore we must know which they really are. They are not necessarily obvious from present use. Far too much first-class arable soil has gone under bricks, mortar, shabby back greens, tar macadam, and sheer waste space, between the two wars. We cannot afford to lose more unnecessarily. The modern town and country planner is fully alive to this ; but he demands a soil survey so that the soil factor may be duly weighed in allocating sites to our new housing areas.

There are other reasons why we should be planning for agriculture. We are 80 per cent. an urban people—far too much urban for the good of our health—spiritual, mental, and physical, as our psychologists insist. To this add the proved fact that urban populations are non-self-reproductive, and we have but two of the many reasons for planning to make agricultural life attractive, to take from it the uncouth housing conditions, and give facilities for recreation and culture comparable with those of the towns.

We must have a clear small-farming policy, and this requires planning. Only on an improved crofting foundation can we rebuild the Highlands.* From 1916 to 1939 there were from 9000 to 10,000 unsatisfied applications for small holdings continually on the books of the Department of Agriculture for Scotland. Against this demand must be balanced the claims of mechanised farming for increased size of arable farms and fields. Although at first sight it may appear that these claims are incompatible, this is not necessarily so, provided we plan now.

Many other factors spring to mind as reasons why we should plan now. Transport, including aviation ; education and recreation systems in town and country ; National Parks ; forestry ; hydro-electric schemes ; mines : these are but a few of the interrelated items which are clamant for their share of the land.

It is at least as easy to build to a plan as to build without one, while the after benefits are incalculable.

* See "Crofting on Bogs" in the issue of *Scottish Geographical Magazine* for February 1941.

To avoid confusion and waste ; to promote efficiency, economy, and, above all, human well-being ; these shares must be justly determined ; and this can be accomplished only if Government, local authority, professional planner, and, most important of all, an educated public, plan and *plan now.*

THE TURKISH CHARACTER AS SHOWN BY HISTORY

By Lieut.-Col. G. V. Holmes, F.R.S.G.S.

It must be recognised that the Turkey of the present day is about a century behind Western civilisation, and that the present Turks, who no longer call themselves Osmanlis, are no longer pure-blooded stock from Central Asia. Their ancestors, who were a nomad tribe of Turks, settled in Asia Minor in the thirteenth century, and came into European history.

From the time when the first Sultan, Osman, began to conquer small neighbouring states, until, at any rate, the era of conquest was over, about the middle of the sixteenth century, there was a steady flow of non-Turkish blood into the nation—Greek, original Anatolian, Armenian and Jewish mothers, and many others have, so to speak, married into the nation.

But one fact remains. It is the fathers and not the mothers who have moulded the present Turkish character. Let us consider this character.

Up to about a decade ago, the Turkish nation favoured an autocratic government, by a member of the Royal House of Othman; it now has a Parliament, with limited control, but it has yet to show itself capable of being satisfactorily ruled by it.

The Turkish mentality is essentially a military one, the object of all wars having been territory, plunder, and, in the earlier wars, slaves. Religion had no part in these wars ; after a successful campaign there was no forcible conversion to Islam of any prisoners. Although Selim I made war on Egypt, and returned to Constantinople with the title of " Caliph of Islam," this venture was made for the purpose of prestige.

In 1922 the then Ruler of Turkey, Mustapha Kemal, bundled (there is no other word for it) the Caliph, the last representative of the House of Othman, unceremoniously out of the capital, and no public protest was raised. Since then Islam has been abolished as a State religion, and all monies appertaining to religious institutions were seized.

This military mentality has made the Army the principal power in the State. Along with this mentality goes unquestioning obedience to authority. But, it must be noted, history has shown that there

are two provisos to this : *(a)* the authority must be properly constituted in the eyes of the people, represented by the Army ; and *(b)* the authority must be in capable hands.

Up till 1922 the authority was the House of Othman, then, till 1938, Mustapha Kemal, then the General National Assembly. It remains to be seen how this will work under stress. Subject to the two provisos, the Turk has no objection to the most arbitrary methods. I will mention two instances.

When Sultan Mahmud, in 1826, found the pampered Corps of Janissaries interfering in matters of State he decided to abolish them. Within twenty-four hours he had every man of the Corps killed—about 18,000 in all. The nation applauded !

Another case occurred in our own time. Mustapha Kemal, on becoming President—in reality Dictator—of the Republic, introduced many reforms into the nation's life. There was a good deal of sporadic opposition throughout the country. The Ruler dealt with this opposition in a way the Turks understand. He established a sort of Court of Assize which sat at all places where there was any opposition to the reforms, tried all objectors, and promptly hanged them in the principal street. Opposition to the reforms ceased.

The people now worship the name of Kemal, to whom they gave their trust after he had defeated the Greeks in Asia Minor, and made the Allies evacuate Constantinople, and the Turks looked on him as a fitting successor to the House of Osman. So much for the strong ruler.

On the other hand, some Sultans were deposed, as the nation, represented by the Army, has never for long suffered the reins of power being in feeble hands. In all the dethronements, including the execution of rulers, there has never been a revolution in the true sense of the word. Having deposed their sovereign, the Turks have been quite content to choose another member of the Royal House. There has been no objection to the system of absolute autocracy, only to the feeble manner in which it has been carried out.

Another quality of the Turks is their intense national vitality. In 1403 the growing Turkish Empire was invaded by Timur the Tartar and utterly dismembered. The territory in Asia Minor was apportioned by Timur amongst petty Emirs. But Timur's hordes shortly returned whence they had come, and left no trace but ruin and desolation.

The eldest son of Bayazid the Turkish Sultan, who had suffered this calamity, set to work on reorganisation, by 1450 had largely rebuilt the Empire, and by 1453 his son, Mahommed II, was able to conquer Constantinople.

Another instance of this national vitality happened in our own time. After the Great War Turkey was reduced to the lowest condition in her history. The victorious Powers, Britain, France and Italy, were in occupation of Constantinople, and while bolstering up the Sultan's Government, were portioning out among

themselves the remnants of the Turkish Empire, under the guise of "Spheres of Influence." Mustapha Kemal appeared on the scene, and within about two years he had set up a revolutionary Government in Asia Minor, got together and trained an efficient army, defeated the Greeks and drove them out of Asia Minor, and finally compelled the Allies to evacuate Constantinople.

These two examples of national recovery, some 600 years apart, bear striking evidence of the recuperative power of the nation.

Not only in military affairs has Turkey prospered, but in finance and commerce as well, in spite of Kemal having removed the capital to Ankara in Asia Minor, far removed from cosmopolitan European influence, and having limited the number of foreigners living in Turkey and the amount of foreign capital in Turkish concerns.

The life of the nation, that is, progress and prosperity, or the reverse, has entirely depended on the qualities of the Ruler for the time being. In the hands of able though cruel and unscrupulous sultans, Turkey flourished. Gradual deterioration in the Sultans brought the country to such a state that, for years, only the rivalries of the Great European Powers prevented its collapse. From this state Kemal, a man of humble origin but of exceptional powers, rescued it and brought it to its prosperous and self-respecting condition.

Kemal saw that the era of conquest was past, and set to work to teach his people the arts of peace—industry, commerce, etc.—and, most important of all, how to govern themselves. Results seem to show that they are acquiring this knowledge with their usual plodding spirit.

The character of his people in the mass was not too promising when he began. Their valour in war is universally recognised, but they are lethargic, unimaginative, conservative in their habits, callous to suffering rather than ferociously cruel, quite content with life as it is with its animal comforts, but, at the bidding of their Ruler, ready to undergo any hardship with dogged persistence. A wonderful people for an ambitious and capable ruler to work with.

One of the most revolutionary changes in the life of the people is the emancipation of women. To the question how it has happened that women have abruptly emerged from strict seclusion to take part in every walk of public life, the answer would seem to be that they have always exercised much more influence behind the scenes than foreigners supposed, and that now their habits have reverted to type, for in the prehistoric wandering and fighting tribe there was no place for idlers of either sex.

These adjustments of the national life to present-day conditions bring one to the conclusion that the virile Turkish nation comes of very fine stock.

The question now of interest is, how will the present emancipated nation govern itself? Mustapha Kemal, who knew his people, was

convinced that they could, and his judgment may be relied on. But critical times are ahead. The Turks have always shown stability of purpose, whether for good or evil. I venture to suggest that they will adhere to any policy they have determined on. What is that policy?

As far as we know it is to keep Turkish soil free from any foreign invader or intruder, and they seem likely to try to do so.

There is an unpleasant side of Turkish character which must be mentioned, the treatment of subject races and of non-Turkish elements in Turkey itself.

In Serbia, Bulgaria and Greece the tale is the same—mal-administration by corrupt Turkish officials, and revolt ruthlessly repressed. The Armenians actually lived in Turkey side by side throughout the country, and this adds to the infamy of the sudden attacks on them by the Turks in 1894-5-6, even in the capital itself. The crowning atrocities occurred in 1915 when 600,000 Armenians were brutally murdered.

The policy of massacre is, it may be hoped, ended for ever, and we may hope that a virile and steadfast people may long be our allies and friends.

At the beginning of the present war the Turkish press, inspired by Government, was wholly and enthusiastically on the side of the Allies. The tone of the press now is still friendly to us, but by no means enthusiastic. Hitler's subjection of various countries has had its effect. Turkey also has always been suspicious of the intentions of their great neighbour with regard to the Dardanelles, and the suggestion last May to hand over the leadership of Europe to the Soviet Union thoroughly alarmed the Turks, an alarm which was not allayed by subsequent explanations, and has now been revived as the result of the apparent trend of policy.

We can only hope that there is no real cause for this alarm, and that the free and independent Turkish Empire and the British Commonwealth may permanently co-operate in the paths of peace and prosperity.

LUSICKI SRBI

By a Yugoslav Correspondent

GERMANY to the north of the river Elbe has certainly been populated by Slav elements. During the Middle Ages such elements were Germanised or destroyed or were pushed eastward. In order to justify these conquests of Slav territory, German science puts forward the scientific thesis that the Slavs came up to that line when the Germans were occupied towards the west, being pushed on by the Mongol race, especially the Huns, and in particular during the Great Migration.

As a matter of fact, on the island of Rugen there have been excavated the remains of a great Slav sanctuary, probably a Temple of the Sun, as well as other vestiges of the Slav people and Slav culture, which have been found along the Baltic coast, up to the line Hamburg-Dresden. Even in the territory in which there may be found today the remnants of the Lusicki Srbi, the Slav language has lived through the whole of the Middle Ages, and would be the spoken language of the villages and peasants up to the eighteenth century. Even in the time of Frederick the Great, proclamations to the villages were made in the Slav language by the crier.

By the side of the remnants of the Poles and of the old Lithuanian people, in two places on the territory of the present-day German Reich, live compact remnants of the Lusicki Srbi. Like islands after the flood of Germans and the bloody destruction of the villages, two circles of the Lusicki Srbi remain to-day : one smaller one close to the environs of Berlin, and the other in the neighbourhood of Budisina, Bauzen, in Saxony.

The Lusicki Srbi are the remnants of those Slavs who came from the Carpathians towards the west and the south. Without any doubt they are of Slav blood and they have preserved the old Slav language, which they call " serbskim," as inscribed on one of their buildings in Bauzen, known as the " Serbski Dom," as well as on the newspaper *Serbskim Novinama* which was published in the same town until recently. Although their spoken language is nearer to the Czech and Polish language of today than to the modern Serbian language, it is without doubt that there exists a great resemblance between these two Serbian languages, and the basis of the common ancient Slav origin is especially obvious.

According to the admission of the German scientists, the town of Berlin was built on the site of an old Slav fishing place populated by the Lusicki Srbi. All the topographical names in the neighbourhood of Berlin (Nikola See, Pieskow, Treptow, etc.) are absolutely of Slav origin. The Lusicki Srbi live today along the rivers and swamps of the Spreje and serve as a tourist attraction to the Germans, because they have preserved special national costumes, old national customs, certainly of pagan origin, as well as the Slav language.

In order to render these remains of a destroyed people less noticeable, the Germans defend the thesis that the Lusicki Srbi are Wends. According to the Germans, the Wends are not Slavs, but some kind of intermediate element between the Slav and the German races. The Slavs in the neighbourhood of Berlin, who are Slavs today, and who know it, have demonstrated their Slav origin till the terror of Nazism began even against them. It is characteristic that even the Weimar Republic terrorised this Slav remnant, simply for the reason that they tried to preserve their old culture and keep in touch with the larger island of the Slav element round the town of Bauzen. Against the Lusicki Srbi were used the same

methods of terror as against the Poles in Germany. According to German statistics, in the neighbourhood of Berlin there are about 20,000 of the Lusicki Srbi, but according to information from the centres of the Lusicki Srbi their number is much greater, but the very statement that someone today considers himself to be of Slav origin is enough to bring him into danger of the death penalty.

The much larger island of Lusicki Srbi live today in the neighbourhood of Bauzen, which is the centre of their national culture. In Bauzen exists a large, many-storied building called the "Serbski Dom." This was so up to the coming into power of the Nazis. In the same town the Lusicki Srbi have had their own newspaper (*Serbske Novine*) which was published in the Serbian and German languages. This newspaper was published for decades, in a hard struggle against the German authorities and the German chauvinistic societies. These same Lusicki Srbi have had in Bauzen their own peasant co-operative organisations, as well as a publishing house which issued the collection of the national poetry and pictures of the national costumes. They also had in Bauzen their own intellectual circle of writers, and the women were especially prominent in the cultural struggle for the preservation of the Serbian language and literature. The collections of the national stories and fairy tales of the Lusicki Srbi possess a value that transcends the frontiers of a small, tragic people.

According to recent German statistics there were in the neighbourhood of Bauzen, Meissena, and up to the suburbs of Dresden, about 60,000 Lusicki Srbi, but according to the statistics of the Lusicki Srbi themselves their numbers exceed 100,000. Through the coming into power of the Nazis the Lusicki Srbi suffered under great terror, and this because of the Communist cultural tendency of their newspaper. Teachers and literary men were put in prison at the beginning of the war, although they were loyal in the carrying out of their duty towards Germany, and have been transferred to concentration camps. Especially tragic was the fate of the women writers and teachers among the Lusicki Srbi.

The Germans knew well what was going on with the Lusicki Srbi, but spoke of it with the greatest cynicism. It is characteristic that even the Weimar Republic took up this position against the Lusicki Srbi, without any compunction. The Germany which had protested so loudly against other people for the rights of her own colonists in other countries, has shown what attitude the German people have taken up against the Slavs even when there came into question only the small remnants of a tragic but destroyed great people.

In Dresden, almost all the wet-nurses are Lusicke Srpkinje, who are noted for their health. These poor young women are only Slav creatures to whom the Germans gave some importance, and who were sought for their children under the German name, *i.e.* under the name of Wends.

THE UNITED STATES AS A CARIBBEAN POWER: ECONOMIC RELATIONS *

By Norman Pye, B.A., Assistant Lecturer in Geography, Manchester University

In the earlier chequered lives of the Spanish-American Colonies the United States had not intervened, although, in their own interests, keeping a watchful eye on events there. The event which did most to develop an American Caribbean consciousness was the 1849 gold rush to California. The most direct line of transport from New York to the Caribbean and Panama passed through the Windward Channel between Cuba and Hispaniola. Because of its relation to the approach to the proposed trans-isthmian canal Cuba was important for the United States for strategic reasons.

The United States could not see such an important communication between its two isolated nuclei of population fall under the exclusive control of any other Great Power. The Americans realised that even though they might control the proposed canal, U.S.A. should also have control of the neighbouring water which connected the United States with the canal.

During the period before the Civil War a factor of increasing importance as a supplement to the strategic reasons for America's interest in Cuba was the growing Cuban-American trade.

Their economies are for the most part complementary, and the contrast in the nature of commodities exchanged between the United States and Cuba exemplified the definition of trade as the satisfaction of mutual requirements.

Prior to 1825 the amount of trade between U.S.A. and the Caribbean region was very small, but after 1825 U.S.A. commercial interests in Cuba grew steadily, and by 1830 Cuba was exporting more to the United States than to all the other foreign countries combined. Many Americans settled in Cuba, and technical improvements in the sugar industry were very largely due to American settlers, especially near Matanzas and Cardenas. Cuba's economic value for U.S.A. lay in the fact that it was a source of many important requirements in tropical foodstuffs and raw materials.

During the first three decades of the nineteenth century coffee was the particular product in which Cuba excelled, the maximum export being 64,150,000 lbs. in 1833. The Spanish decree of 1834 which imposed differential duties against American flour brought reprisals from the United States against Cuban coffee. This, together with the violent hurricanes of 1843 and 1846, destroyed Cuba's supremacy in coffee exporting. This was being counterbalanced, however, by the growth of the tobacco and sugar industries in Cuba. The latter was of special importance. In 1827 there was

* See *Scottish Geographical Magazine*, June 1941.

an output of 90,000 tons of sugar ; by 1856 the output was over 300,000 tons. Cuba was then the foremost sugar-producing area in the world. During the 'fifties, when the U.S.A. annexation movement was very powerful, the annexationists looked forward to a time when, with the incorporation of Cuba within the political framework of the United States, they would control the world supply of sugar as absolutely as they did the supply of cotton.

By 1856 U.S.A. was exporting each year to Cuba goods to the value of $8,000,000, temperate foodstuffs and manufactured goods being the staples of that trade. In return, U.S.A. was receiving from Cuba goods to the value of $12,000,000, the main items in this trade being sugar (over 80 per cent. of the exports) and tobacco. This trade with the United States amounted to about one-third of the entire foreign trade of Cuba.

The years that followed the Civil War were characterised by the predominance of commercial and manufacturing interests in the United States. As a source of tropical products, and as a market for the growing production of the United States, Cuba took on an increased importance, and the trade relations between Cuba and the U.S.A. became still more intimate after the Civil War.

By 1867 the sugar industry dominated the island and the sugar estate was the predominant unit in the economic life of Cuba. The decline of other products was a serious blow to those whose lands were adapted only for coffee growing, and it was significant that the insurrection of 1869 was headed by coffee planters and stockmen.

The most important consequence of the Ten Years' War was that by ruining the eastern end of the island it had definitely reduced Cuba to two major crops—sugar and tobacco. The discouraging economic conditions in 1879 enabled American capitalists to pick up sugar estates in Cuba at advantageous prices. This marks the beginning of the expansion of American economic interests in Cuba on a large scale, and the revolution in Cuba's sugar industry between 1879 and 1895 was to emphasise this feature. Competition from subsidised European beet sugar forced Cuba to reorganise her industry. Cuba offered an admirable field near home for American investors, and this reorganisation brought American capital into the production of sugar, for although Americans developed estates on virgin soil, many of the investments were loans to planters to enable them to harvest and mill their crops.

Outside the sugar industry investments were made before 1898, chiefly in mining, *e.g.* the chrome iron ore mines in Santiago province ; the valuable mine of manganese and nickel iron ore near Daiquiri. There were in addition some tobacco estates.

Not only had the economic interests of the United States in Cuba broadened between 1879 and 1895, but ethnic and cultural relations had increased American interest in Cuban affairs. The proximity of U.S.A. to Cuba had made American ports the refuge for Cuban exiles and the home of the Cuban Junta. Many of the

leaders of the 1869 revolt had adopted Florida as their home and become naturalised Americans. There was an expanding social intercourse between the mainland and the island, and wealthy Cubans sent their children to be educated in the United States.

The Foster-Canovas reciprocity treaty of 1891 between Spain and U.S.A. opened the American market to Cuba and led to an unprecedented expansion of Cuban raw sugar manufacture. In 1893 Cuba's crop exceeded a million tons—the maximum for the century. Trade flourished and practically all the import and export trade of Cuba was in the hands of the Americans. When the Wilson tariff revision in 1894 restored the sugar duty and abolished reciprocity with Cuba, the resulting decline in the price of the island's chief product caused economic distress. The insurrection of 1895 had its origin in this. Spain's utmost exertions were insufficient to cope with the insurrection.

The cutting-off of importations of food and the prevention of agriculture except within the Spanish lines meant that America's trade with Cuba almost disappeared. Public opinion in U.S.A. was aroused by the problem of protecting American lives in Cuba and by the damage to American economic interests.

The American capital invested in Cuba, whether in property or loans on the 1896 sugar crop (and one-third of American capital was in the form of an advance on this crop), was valueless as long as war continued.

The United States felt the urge to put down the Cuban disturbances for many reasons, but the object of intervention was stated to be to secure the freedom and independence of the island.

Humanitarianism had been invoked to make intervention possible, but the self-denying ordinance of Congress was opposed to dominant economic and strategic interests; and though the plea of humanitarianism set a limit to any control of Cuba, yet before the military occupation was ended in 1902 that control had been made completely effective by the Platt Amendment to the Cuban Constitution of 1901.

Though technically independent, Cuba's sovereignty is limited by the Platt Amendment. Although the government of the United States has not actually intervened in Cuba since 1906-9, representations have from time to time been made to the Cuban government to prevent the development of conditions which might have brought about another intervention.

Like most regions Cuba has its geographical assets and its liabilities. In point of size it is large enough to allow of a considerable diversity of soil and relief and to afford a large field for tropical agriculture; yet it is too small to provide a home market for a very large fraction of its major products. Although Cuba has great mineral deposits, especially in the Oriente province, and tobacco is an important industry in the western provinces, the paramount importance of sugar production made Cuba practically a one-crop

country. So much of the arable soil is devoted to sugar cane as to make it necessary to import great quantities of food supplies. Exports are Cuba's life blood, and this export trade is made up for the greater part by the one traditional crop, sugar. It is thus dependent upon outside markets, to whose tariff laws and other policies it must submit. The proximity of Cuba to a great nation which lacks this surplus tropical produce, and which is in turn able to supply temperate produce such as grain and lumber as well as manufactured goods, has been of fundamental importance in their commercial connections. The short distance separating Cuban ports from those of the neighbouring ports of the United States has helped to foster this reciprocal trade, and to make U.S.A. Cuba's best customer and one of the countries from which the latter buys most heavily.

From the economic and commercial standpoint Cuba is easily the most important Caribbean country, its commerce with the United States exceeds that of any other Latin American republic, and as regards the value of American capital investments it is the third country in the world. Cuba's main contribution to the Allied cause in 1917 was the production of sugar, to make up the deficiency in the world supply caused by the devastation of the sugar-beet producing areas of Europe. Financial assistance was extended to the Cuban sugar industry by American banks, and the crop was purchased at a fixed guaranteed price. Sugar production was increased from less than 3,000,000 tons in 1913 to nearly 4,500,000 tons in 1919. The end of the war brought the end of sugar price-control in the United States, but with world production still below normal requirements the Cuban sugar industry experienced great prosperity. With the resumption of sugar-beet production in Europe the price of sugar declined as rapidly as it had risen, and by 1920-21 the sugar producers and banks who had invested in sugar properties on the basis of the war-time inflated values were seriously affected.

The proportion of the sugar crop manufactured by American owned mills was estimated at more than 60 per cent. by 1927, and the control of an increased proportion of the sugar mills by American capital has reduced Cuban growers to dependence on the American controllers of transport and sugar manufacturing facilities, and they also find themselves compelled to sell their products to and buy their supplies from the local company.

Cuba's economic welfare depends on her ability to sell sugar to the United States, and it was recognition of this that led the United States government to give Cuba an assured market in the States by granting preferential treatment to the Cuban sugar crop when the republic was established. As Cuba had become in a sense part of U.S.A.'s political system, so she was to be given some of the benefits of becoming part of the United States economic system. The Commercial Convention of 1902 provided in general for a 20 per

cent. reduction in customs duties upon all imports from Cuba into the United States, and for a reduction of 20 to 40 per cent. upon importations from the U.S.A. to Cuba. The advantages secured to the Cuban sugar industry by the reciprocity treaty made possible the growth of the sugar industry from 1,000,000 tons in 1903 to nearly 3,000,000 tons in 1913. Until 1914 all Cuban sugar was sold in the American market, but when increased production made it necessary to sell part of the crop elsewhere, the competition among growers tended to reduce the price of sugar in Cuba to that on the world market, rather than that in the protected United States market. A substantial part of the advantages of the reciprocity clauses then disappeared. The increased production of beet sugar placed the Cuban planter in an increasingly difficult position, whilst efforts to improve the situation by restriction have been offset by increasing protective tariffs for the benefit of local producers in other countries, and in the United States there is now more and more competition from entirely duty-free sugar grown in the United States and its possessions. Extension of economic assistance to Cuba is recognised by the American government as an important means of promoting more stable political conditions there.

It can be said in general that the diplomacy of the United States with the Caribbean republics outside Cuba has been predominantly concerned with the political questions of the promotion of stable government in the individual countries and the prevention of international conflict, rather than with commerce or finance. Commercial questions have been unimportant, the total American trade with all the Caribbean countries being insignificant compared to that with Cuba. Questions of public finance have had attention because of their bearing on political stability, and because it was feared that international complications would result from the failure of the Caribbean governments to meet their obligations to foreign creditors.

The Monroe Doctrine of the nineteenth century was primarily a doctrine in defence of United States interests and security. For economic and strategic reasons the United States intervened repeatedly in the affairs of the island republics and exercised in fact a virtual protectorate. At the beginning of the twentieth century it appeared to Latin America to be an assertion of American economic and political sovereignty in the Caribbean area. The progress made towards the establishment of permanently stable political institutions in the West Indian and Central American republics has materially affected the basic factors governing the Caribbean policy of the United States. The present war has quickened the tendency towards strengthening strategic, political and economic relations between the United States and the Caribbean republics ; under President Roosevelt's policy of recognising the governments, and disclaiming the right to interfere in the

affairs of her neighbours, a change has been brought about in American relations, and the development of political co-operation, as worked in the Pan-American Conferences, has its counterpart in increasing co-operation in economic affairs.

THE ICEBREAKER AND ITS "CARAVAN"

By a Correspondent

Not long before the outbreak of war, I had been on one of my frequent business visits to the Baltic States and Finland, and had finished up at Riga. It was spring-time—April—the clean, dry snow of those countries had given place to the unpleasant spring slush and mud, and this made me the more anxious to get away. I was not very desirous to have the long and monotonous railway journey across Latvia, Lithuania, Poland, Belgium, Germany, and Holland, not interesting at this time of the year. There was no available passenger steamer to Britain, but there were fairly frequent cargo boats carrying farm produce to London. I found that the Latvian tramp steamer *Salaca* was about ready to sail, and I secured a passage through an influential Scottish friend, only paying so much a day to cover the cost of food. I was told I would not find either accommodation or food luxurious, and I didn't. But I am an old traveller and that did not worry me as long as I was moving homeward.

There was a hearty little Scots colony in Riga. Their business men met every morning at half-past eleven at the "Automat" coffee house, after the closing of the Exchange, for coffee and a gossip, and in all my previous visits I had been made a welcome member of the little circle.

The *Salaca* was to sail in the evening, and I had said goodbye to my Scots friends, ready to join the steamer in the afternoon. The *Salaca* did not sail. The Gulf of Riga was full of heavy ice through which we could not steam. The icebreaker was outside, was on her way in, and we would leave as soon as she arrived, late that night. She did not arrive ; so far from coming in to help us out she had become jammed herself in some particularly heavy ice.

Day followed day, and life became wearisome. All cold countries are unpleasant in the spring when ice and snow are melting, and getting about is both difficult and dirty. At length word came that the icebreaker had got through, and had gone right on up river to coal. The noble Latvian river, the Daugava, shown on some maps as the Dvina, was free of ice, and we were told to steam down as far as the end of open water and wait there for the icebreaker.

I joined the *Salaca*. I found myself far from being in the lap of luxury. There was only one cabin, opening off the tiny saloon, barely big enough to turn round in, but with two iron bunks. No

outlet to fresh air, no mattresses or bedding of any kind, no pillow, no towel, no soap, nothing of any kind but the bare cabin and the bare iron bunks. It was then evening, and too late to go back up town to buy anything. Philosophically I rolled up a jacket for a pillow, used my overcoat for a mattress and a heavy raincoat for blankets, while an under garment did duty for a towel.

Owing to a long succession of easterly winds the ice conditions in the Gulf were very bad—none of it had gone out, but it had piled up into heavy masses. Ships from and to Riga went out and came in in groups, following in a channel kept open by the icebreaker.

We left Riga about half-past five in the evening, and steamed down to the edge of the ice, about fifteen miles. We nosed our way as far as we could go into the loose ice along with four other ships, which, with us, formed the " caravan," and lay still, waiting for the icebreaker, the *Krystyanis Valdemaris* (so named after a great Latvian patriot), to come down and collect us. She arrived about ten at night: an odd-looking vessel, the shape of an oblong dish, very broad in the beam, with sides sharply rounded from keel to waterline. She was cut away sharply inwards at both bow and stern, with a propeller at each end. She had large water tanks at each side, which could be rapidly filled and emptied, so that, if she had to lie up during the night, with heavy ice freezing to her sides, the tanks could be filled and emptied, first at one side and then the other, setting up a rocking motion, and breaking off the adhering ice.

She was a powerful ship with engines of 3000 horse-power. When in the ice she steamed ahead, and if it was too heavy to bore through, she gradually mounted on it with her slanting stem, until her sheer weight crushed it under her, and then she went on. If she stuck, she backed a good bit, then made a rush, and either broke the barrier or mounted and crushed again, and plodded on. The caravan followed in single file in the channel she made.

The *Krystyanis* had an immensely powerful searchlight at both bow and stern, so that, in the dark, she could see her way among the less heavy ice and look for open leads, and at the same time keep her eye on her flock astern. Each ship of the caravan had a light at bow and stern so as to keep in line.

When our leader had gathered the caravan together and given each captain his place in the line, the *Salaca* coming first, we started on our journey. The ice was heavy—in places piled up to a dozen feet thick, and the masses broken up by the leader kept crashing against our sides all the time we were moving, with a noise like thunder.

We went on for only an hour or two, and then were told to stop till daylight, when we resumed in the same order as before. The *Salaca* was really a very old and very dirty steamer, sold out of service by a British firm many years before, but patched up by a

Latvian one. She was sadly in want of repair in both hull and engines. About midday our engines suddenly began to race at terrific speed, and the old tub nearly shook herself to pieces. An unusually heavy mass of ice had struck our very dilapidated propeller and sent it to the bottom, and the tail shaft had nearly shaken itself out of its bed before the engines could be stopped.

Back came the icebreaker at our signal, and after a conference with the captains it was decided that the rest of the vessels must be taken out by the icebreaker through the remaining sixty miles of ice, and that we must just trust to Providence to being above water when she returned to our rescue. We had then done about thirty miles, and were well out of sight of land, and we had no wireless to communicate our condition from time to time to any who might be interested. There was no great danger if the weather remained calm. The pumps were going night and day, and kept the leaks under control. If the wind rose, the ice would pile over the deck and we would go to the bottom. Fortunately it remained calm. We were in no danger of suffering from hunger or thirst; the cargo consisted mainly of bacon and butter, while there was plenty of ice at hand to melt into fresh water.

It was not, however, very inspiriting to see the caravan gradually disappearing over the horizon, leaving us to cold and the dead silence of the icefield. Night followed day, and day followed night; nothing but ice everywhere: not a sound except the clank of the pumps, not a sign of life except on the boat, nothing to do, nothing to read, and no comfortable corner to snuggle into.

Then one night a little after six I heard a sound miles away on our starboard which I was sure was the sound of a steamer's siren, but no one agreed with me. All that day we had been in dense fog, so dense that we could not see the length of the ship, and we were uneasy in case the *Krystyanis* could not pick us up. Shortly after I heard the sound again, and prevailed on the captain to sound his whistle. Gradually the siren came nearer and nearer till all at once the powerful searchlight burst into view, and the icebreaker crushed her way alongside. Then not a minute was lost; a four-inch steel wire was made fast to us, and we were towed out slowly through the remaining sixty miles of ice to open water. Here two tiny tugs were waiting for us, the *Krystyanis* cast off and returned to Riga with an ingoing caravan which was waiting for her, while we were towed all day and all night to Liepaja (Libau). Again our belated luck held. The sea was calm as a pond, the sky was a cloudless blue, the sun was shining, and the air as bracing as champagne. After the days in ice and fog, everything in the garden was lovely.

But when we got to Liepaja we, or at least I, had a shock. The *Salaca* would have to go into dry dock for repair, and would be there at least ten days.

In the meantime we berthed alongside a trim little steamer

with the homely name of *Sutherland*. I went on board, and found she was one of the Currie Line of Leith, soon to sail for London. She had excellent accommodation for a few passengers but no passengers, and I was given a cordial welcome by the Captain and Chief Steward, and a veritable suité for myself.

I had a few days to spend in Liepaja; but by this time the weather was sunny and perfect, all snow and mud had gone some time, the country was looking its best in the sudden spring. As always, the people were cordial and kind, and my stay was very pleasant, and my recollections of Liepaja of the pleasantest. The town and harbour with its well-equipped docks is an important one of which the Republic made great use, and intended greatly to develop.

In due course the *Sutherland* sailed, we passed down into the wonderful blue of the Baltic in glorious weather, and that was the last I saw of a free and independent Finland, Latvia, Lithuania, and Estonia.

Incidentally, as we neared the Kiel Canal we passed through the German fleet exercising—cruisers, destroyers, submarines, aeroplanes, and flying boats: a great array. We were warned to keep well away, to forget what we had seen, and to be sure that we had no camera. An ominous prelude to what was so soon to follow.

Meantime, the door of the three kindly Baltic States is closed to us. Their lovely country, their glorious beaches, their rich artistic and archæological treasures, their ecclesiastical gems, their cultured, industrious, capable, and warmly welcoming peoples are to us as if they did not exist. And, not a trifling matter, their trade is denied us.

But, to anyone who knows these peoples and who has studied their history, and is conversant with the way they have stood up to persecution and oppression for centuries, only to carve their way to freedom and independence in the end, it is as certain as that the sun will shine to-morrow, that they will rise again and will fill the place in the world that their past entitles us to expect. And I shall again travel behind the icebreaker.

REVIEWS OF BOOKS

[*Members will appreciate that, owing to war conditions and the shortage of paper from which publishers are suffering, comparatively few books are at present being published.*]

EUROPE

Flight into Portugal. By R. Bodley. Illustrated. Demy 8vo. Pp. xi+224. London: Jarrolds Ltd., 1941. *Price* 16*s*.

The writer is a journalist of long standing, and his description of the flight and escape from Paris after the French collapse is one of the most graphic and arresting of the many books that have been written on the subject. The actual

escape occupies a large part of the book, and the remainder is devoted to the writer's travels through parts of Portugal while waiting for facilities to leave the country. His descriptions are excellent, while he also quotes considerably from Portuguese history. He is full of nothing but the highest praise of Portugal and everything Portuguese until he travelled on a Portuguese steamer to the United States, when he loses his enthusiasm. His spelling of names is not always correct —there is no "s" in Tangier; one does not "reek" vengeance; and so on. The illustrations are particularly fine.

Heart of Spain. By G. G. King. Illustrated. 10×7. Pp. 179. Cambridge, Mass.: Harvard University Press, 1941. *Price* $3.00.

This finely-got-up work is published as a memorial of Miss King, a well-known and well-loved Lecturer at Bryn Mawr, who completed it before her death. Of a poetic and artistic temperament, with an intense love of Spain and the Spanish people, she wrote with an intimate knowledge vouchsafed to few, and this book is outstanding.

Snowdonia through the Lens. By W. A. Poucher. Illustrated. Fcap. fol. Pp. 124. London: Chapman & Hall Ltd., 1941. *Price* 18*s.*

The get-up of this book follows the prevailing modern fashion, namely, a book of illustrations with descriptive paragraphs. There are 62 illustrations, most of which attain a high standard of composition and execution, and accompanying these illustrations are notes which trace tours over the main tops in Snowdonia. There are, in addition, exact notes of cameras and films used, exposure, etc., which will be of considerable value to keen photographers, and also a quite useful questionnaire and answers. A. H.

The Land of Britain. Edited by L. D. Stamp. London: Geographical Publications, 1941. *Price* 1*s.* 6*d each.*

These are the Reports of the Land Utilisation Survey of Britain, and deal with, in separate volumes, Banffshire, Cambridgeshire, Devonshire, Durham County, Huntingdonshire, Shropshire, and the West Riding of Yorkshire. In spite of war-time difficulties, they are as well produced as ever, and, naturally, are authoritative and exhaustive. They contain the usual clear and abundant explanatory diagrams.

At Slieve Gullion's Foot. By W. J. Murphy. Illustrated. Demy 8vo. Pp. 115. 1940. *Price* 3*s.* 6*d.*

On Our Hill. By Annette Barlee. Illustrated. Small 4to. Pp. 100. *Price* 3*s.* 6*d.* Dundalgan Press, Dundalk.

These two small volumes issued by the Dundalgan Press provide reading of the most pleasant kind, and take the reader's mind far from the war and the unsettling conditions of the world to-day. They are both concerned with the immediate neighbourhood of the writers, but will make an appeal to a very wide circle, and can be cordially recommended.

English Woodland. By John Rodgers. Illustrated. Demy 8vo. Pp. xii+132. London: Batsford, 1942. *Price* 10*s.* 6*d.*

As usual, Messrs. Batsford leave very little for the reviewer to say beyond calling the attention of readers to this fascinating volume. There is not much that is more vital to our future than our home-grown woodlands, and the author not only deals with the commercial aspect of the timber, but with the history and literature of the subject and with the surviving remains of ancient forests. He has written a delightful book, and one which also takes one's mind from the anxieties of the present day. There is a fine coloured frontispiece, and a hundred of the publishers' usual magnificent photos.

The Nazi New Order in Poland. By Jon Evans. Demy 8vo. Pp. 184. London : Victor Gollancz Ltd., 1941. *Price* 6*s.*

This is an account, taken from official sources, of what the Nazi rule in Poland means. It is brutal in all the occupied countries, but in Poland the Germans definitely seem resolved to exterminate the race, and to make no secret about it. The book makes harrowing reading, and if it were not well authenticated, and confirmed independently by many unquestioned authorities, what Mr. Evans tells us would be thought to be the nightmare of a sadist madman. Sadists the Nazis must be or the unspeakable tortures they have invented would not be possible, and it is difficult to see what is to be done with the generations which have been taught to inflict, and are capable of, inflicting them.

Russia in Flux. By Sir John Maynard. Demy 8vo. Pp. 301. London : Victor Gollancz Ltd., 1941. *Price* 7*s.* 6*d.*

The Soviet Union is so much in the public eye at the present time that this little work is particularly welcome. It is only brought up to the March Revolution of 1917, but is invaluable to any student of Russian affairs of the present day, to which it forms a prelude. At the end is a most useful bibliography.

AMERICA

Ports of Piscataqua. By W. S. Saltonstall. Illustrated. 11×7½. Pp. viii+244. Cambridge, Mass. : Harvard University Press, 1941. *Price* 20*s.*

This massive book is the result of much research and a labour of love on the part of the writer. It is a most interesting and entertaining account of the ports of old New Hampshire in the United States from the time of Elizabeth of England to that of Abraham Lincoln. While naturally of particular interest to those familiar with the locality, and to those who go down to the sea in ships, it makes excellent reading.

Cape Horn. By F. Riesenberg. Illustrated. Demy 8vo. Pp. 487. London : Robert Hale Ltd., 1941. *Price* 18*s.*

Captain Riesenberg, himself an old Cape Horn veteran of the sailing-ship days, has written a massive book. It begins with the first round-the-world navigators, and devotes much space to one of the greatest of them all—Magellan; tells of his faith in and attempt to prove the existence of a strait joining the Atlantic and the great South Sea, the Pacific, and his ultimate entry into the latter, after incredible hardships, through the strait bearing his name.

Drake is adequately dealt with, and the writer has an interesting theory to account for the disappearance of the great sailor's discovery—Elizabeth Island. Contrary to a very common belief, Drake was not the first to round the Horn, this distinction belonging to the Dutch Schouten of Hoorn.

Subsequent discoveries and experiences bring the book right up to date, and the writer suggests that the control of the Magellan Strait might have decisive influence in any future war in which any of the Americas might be engaged. The writer's foresight deserves commendation in view of the Pacific War.

The book is fascinating and well worth reading, not only for the history of "Old Cape Stiff," but for the fine graphic descriptions of the passage of the Horn, the mountainous seas, treacherous currents, and icebergs of the region.

If any criticism may be allowed it is that the printer's reader, like Homer, has been nodding. There are a good many grammatical errors : coasts are "charted," not "chartered," "high altitudes" should obviously be "high latitudes," a boat, not being a tree climber, does not land on a "beech." And a glossary of nautical terms would have been an advantage. Captain Riesenberg does not allow for the ignorance of the language of old sailors, and even one like the present reviewer, who has spent much of his life on various oceans, is often puzzled by terms and phrases. Apart from this, the book is of high excellence.

ASIA

Dawn Watch in China. By Joy Homer. Demy 8vo. Pp. 288. London : Collins Ltd., 1941. *Price* 12*s.* 6*d.*

Second Notice

Miss Homer is a skilled and talented writer, and a keen and experienced observer, who has the faculty of transmitting to paper the most vivid pictures of what she has seen. In this case she has had absorbing and unique material to work on, and has risen to the occasion.

Members of the Society who listened to the address in Edinburgh by the Chinese Ambassador on Post-War Reconstruction in China were struck by the almost incredible efforts of the Chinese in reconstruction while carrying on a major war against overwhelming odds. But Miss Homer shows us how extravagantly modest were Dr. Wellington Koo's claims. It is difficult to imagine that another nation exists in the world to-day with the patience and perseverance of the Chinese under the terrible suffering they have borne for over four years, the slaughter of millions of their defenceless men, women and children, and the destruction of their cities.

The author spent some time in Chungking, meeting there the Generalissimo and his incomparable wife. She travelled over a large extent of China, and even in the part occupied by Japan, of which she gives the most harrowing accounts. She stayed among the guerrillas and the Communists, and graphically describes how all the warring elements of the Chinese have been welded into one great patriotic nation by Chiang Kai Shek. Her description of adult and child life under all conditions could not be surpassed.

This is not a book merely to borrow ; it ought to be read and re-read, and kept to refer to as an example of what a nation can endure, and how it can even progress under the most appalling conditions ever borne by human beings.

Soviet Asia : Progress and Problems. By E. S. Bates. Map. Demy 8vo. Pp. 191. London : Jonathan Cape Ltd., 1942. *Price* 8*s.* 6*d.*

This book is of special interest at the present time when the front of the world's stage is almost wholly occupied by Russia and Russia's doings. One does not gather that the writer has had any personal experience of his subject, but he has written a workmanlike epitome of all available evidence, from the most reliable sources, concerning the first fifteen years of Soviet domination in Russian Asia. He shows the enormous developments that have suddenly taken place in various parts, but throws considerable doubt in many cases as to their permanence. One of the reforms which seem to be of very definite value is the emancipation of women, a reform which, while of unspeakable benefit to the women themselves, led to them being the best propagandists the Soviet could have had. The book would have had even greater value and interest had there been less exuberant verbosity on the part of the author, but, as it is, it deserves to be widely read by those who really desire to understand Russia, and are not simply carried away by the vapourings of misguided enthusiasts. It will well repay careful study.

GENERAL

After C. T. Studd. By N. Grubb. Illustrated. Demy 8vo. Pp. 185. London : R.T.S., 1941. *Price* 3*s.* 6*d.*

This is intentionally a missionary book, giving an account of the work done as a sequel to that begun by C. T. Studd, the missionary who was also a great cricketer, after his early and regretted death. It has, however, a geographical interest in that it sheds many interesting sidelights on native life in such widely apart lands as Senegal, Ivory Coast, Spanish Guinea, Belgian Congo, Liberia, and Colombia, Kashmir, and other places.

Economic Geography. By C. F. Jones. Illustrated. Crown fcap. Pp. xxii+626. New York : The Macmillan Company Ltd., 1941. *Price* $4.25.

In surveying the field of Economic Geography, the author defines it as " the study of the relation of the physical factors of the environment and of economic conditions to the productive occupations and the distribution of their output." This point of view is closely observed throughout the volume. From the beginning of a study of this book the student will be forced to see that the world is composed of countries that are mutually dependent ; that he cannot ignore factors which, though not geographical in themselves, have great geographical import: *e.g.* the establishment of quotas, tariffs, subsidies, etc., by the home and foreign countries; that geographical values change with the passage of time and with the inventive genius of man in many directions.

Economic geographies written on a " commodity " plan are apt to weary by their encyclopædic nature, but this work, written on an " occupational " basis, sustains interest throughout. The book is planned under the following headings :—Hunting and Fishing ; Forest Industries ; Grazing Industries ; Occupation of Farming ; Occupation of Mining ; Manufacturing ; Transport. Within each " occupation " there is to be found a grouping of the activities related to the main one, but these are not overburdened with such detailed analysis as to overshadow the general examination of the bases of the main occupation.

The book is not merely the product of research but, in lecture form, has been tried out and found to work over a period of eighteen years.

Every section will be attractive to the student, who will find great help in the appropriate illustrations and in the " selected references " at the end of each chapter. J. Y. E.

Geography and World Power. By J. Fairgrieve. Illustrated. Demy 8vo. Pp. 376. London : Univ. of London Press, 1941. *Price* 7*s.* 6*d.*

The demand for an eighth and revised edition of this book is sufficient testimony to its worth. The author introduces his work with a chapter on what the book is about, examining in particular his opening sentence on the " Control of Geography over History." In the light of this examination he proceeds to a study of the geographical settings of the early civilisations, the ways by which they spread—by land, by seas, by oceans. He points out how the geographical stage of history is constantly being re-set—the actors themselves taking a share in this—but " the story of man's increasing ability to control energy " goes on throughout the ages down to the present time.

Senior classes in Secondary Schools will find in this volume a geographical background that will make their study of the major epochs of world history much more real and interesting. J. Y. E.

The Earth and its Resources. By Finch, Trewartha, and Shearer. Illustrated. Demy 8vo. Pp. 634. New York and London : M'Graw-Hill Book Co. *Price* 17*s.*

" Many of the world's pressing economic and social problems originate, partly at least, in the differences in environment and natural resources over the regions of the earth. . . . It is the purpose of this book, therefore, to present the basic facts concerning the earth as the home of man so that the student may realise their importance and understand their relationship to the problems of his own time and place."

The authors, two Professors of Geography and a Secondary Schoolmaster, have achieved their purpose in writing this book. In particular, they have kept in mind the second of the above-quoted sentences. The main sections in the volume are :—(1) Atmosphere : weather and climate ; (2) Land forms ; (3) Oceans ; (4) Earth resources : waters, vegetation, soils, minerals. Supplementing these are studies of natural vegetation regions and their associated

animal life, viewed with regard to their value to man economically. The final chapter deals with the Major Physical Regions and Resources of the United States.

Each chapter has a neat summary and questionnaire together with a list of reference books, but the maps at the end of the book are of little or no value.

In matter, style, and language the book is well suited for the class library of a Secondary School or College. The illustrations, over four hundred in all, are drawn mainly from the geography of U.S.A., but serve the purpose of illustrating some of the more difficult parts of the text. J. Y. E.

Wanderings with a Shotgun. By Sir Edward Durand. Illustrated. Demy 8vo. Pp. 184. London : Jarrolds Ltd., 1942. *Price* 16*s.*

The writer is not one of the many who write of what they have killed, merely, in so many cases, for the love of butchery and the pleasure of being photographed with a gun in one hand and a foot on the poor animal which has never had a chance of escaping butchery. Sir Edward is the best kind of sportsman, if game have to be killed, and his book is a bright account of his experiences, not only in shooting, in the various countries in which he has been. These include not only the homeland, but the United States and India. An unusually readable book.

British Mountaineers. By F. S. Smythe. Illustrated. 9×6½. Pp. 48. London : Collins Ltd. *Price* 4*s.* 6*d.*

This little work tells the story of mountaineering by one of its greatest exponents. The illustrations, both in colour and black and white, are particularly interesting.

DONATIONS TO THE ROYAL SCOTTISH GEOGRAPHICAL SOCIETY

The existing high rate of Income Tax, ten shillings in the pound, presents a means of doubling donations to the Society through the Income Tax Recovery Scheme. Income Tax can be recovered on the donations of those who sign an Agreement to pay a certain sum, the amount to be settled by the donor, annually for seven years, or until death, should that occur within the seven years. Further particulars may be obtained from the Secretary of the Society.

PROCEEDINGS OF THE ROYAL SCOTTISH GEOGRAPHICAL SOCIETY

Meetings of Council (November 27, 1941, and January 1942)

Presentations to the Library.—The following donors were thanked for their gifts of books, or maps :—Mr. C. C. Gardner ; Prof. A. G. Ogilvie ; Mr. D. Alan Stevenson ; Mr. C. B. Boog Watson ; Miss Thornton ; Miss Bryce ; Mr. James Brown ; Mr. J. F. Stewart ; and Mr. J. A. Thomson.

Election of New Members.—Fourteen ladies and gentlemen were elected members of the Society.

The late Mr. Theodore E. Salvesen of Culrain, F.R.S.E.—The Council received with great regret intimation of the death of Mr. Theodore E. Salvesen, a Fellow, Vice-President, and a Trustee of the Society. Mr. Salvesen was connected with the Society for over fifty years, and took a great interest in all its activities, presiding at lectures, providing hospitality to guests, and, as a Trustee, attending to the financial affairs of the Society.

Lecture Session, 1941-42.—Usher Hall, Edinburgh.

Nov. 29th 1941.	Major C. S. Jarvis, C.M.G., O.B.E., Governor of Sinai from 1922 to 1936, on "The Arab Peoples of the Middle East." Illustrated.
Jan. 24th 1942.	Dr. W. G. Peekema, of Netherlands Ministry of the Colonies, on "The Netherlands East Indies: Their Importance in the Pacific War." Illustrated.
Feb. 21st 1942.	Dr. V. V. Tilea, late Roumanian Minister to Great Britain, on "The Central European States: Their Geographical and Ethnographical Problems." Illustrated.

Afternoon Meetings.—Society's Rooms, Edinburgh.

Dec. 3rd 1941.	D. Alan Stevenson, B.Sc., F.R.S.E., on "The Development of the Lighthouse." Illustrated.
Dec. 10th 1941.	Rev. S. Stephen Walker, on "Singapore and Neighbourhood." Film.
Dec. 17th 1941.	Dr. A. C. Stephen, F.R.S.E., on "Some North American Animals." Film.
Jan. 7th 1942.	Mrs. Stewart Stevenson, on "Holland." Illustrated.
Jan. 14th 1942.	F. C. Mears, A.R.S.A., F.R.I.B.A., on "The Industrial Development of the Lothians." Illustrated.
Jan. 28th 1942.	John F. Stewart, F.R.S.G.S., on "Newfoundland: Our Oldest Colony." Illustrated.
Feb. 4th 1942.	Mrs. I. G. Cormack, on "Daily Life in China." Illustrated.
Feb. 11th 1942.	Lieut.-Col. G. V. Holmes, on "Turkish Character as shown by History." Illustrated.

Afternoon Meetings.—Glasgow.

Nov. 22nd 1941.	Monsieur V. Zonoff, on "Russia." Illustrated.
Dec. 13th 1941.	D. Alan Stevenson, on "The Development of the Lighthouse." Illustrated.
Jan. 17th 1942.	Rev. S. Stephen Walker, on "Singapore and Neighbourhood." Film.
Feb. 28th 1942.	Dr. W. G. Peekema, of Netherlands Ministry of the Colonies, on "The Netherlands East Indies: Their Importance in the Pacific War." Illustrated.

NOTICE TO MEMBERS.—Owing to another drastic cut in the amount of paper allowed for the Magazine, the Society is faced either with still further largely reducing the number of pages or printing fewer copies. A large number have to be set aside for distribution after the war to libraries and other institutions abroad which are entitled to them. If those Members who do not keep their Magazines would send them to the Secretary of the Society after they have finished with them, it would prevent any further reduction in size.